

dwelling units ("MDUs") and commercial multiple tenant units ("MTUs"). PCOs are in direct competition with franchised cable operators. They generally offer the same basic service tiers as their competitors.<sup>255</sup> PCOs are continuing to combine analog antenna and DBS systems in order to provide more service offerings. In addition, digital video and high-speed Internet access offerings are becoming increasingly important to landlords who are seeking new tenants, or are responding to the demands of their current tenants.<sup>256</sup>

76. PCOs are not regulated as traditional cable operators.<sup>257</sup> Some PCOs' systems use microwave transmissions and wires to serve multiple buildings that are not commonly owned.<sup>258</sup> Where a PCO crosses public rights-of-way, that operator becomes a cable operator as defined by the Communications Act, including the franchising obligations of Section 621.<sup>259</sup> On May 16, 2002, the Commission adopted a Report and Order expanding eligibility for licenses in the Cable Television Relay Service ("CARS") to include all MVPDs, including private cable operators. The Order also increased the number of frequencies available to PCOs by permitting the use of 12.70-13.20 GHz band ("12 GHz CARS band") by all MVPDs for delivering programming services to their subscribers.<sup>260</sup> In that proceeding, several commenters contended that use of the lower CARS band of 12.70-13.20 will help PCOs compete with cable MSOs.<sup>261</sup>

77. PCOs consist of hundreds of small and medium-sized firms throughout the United States.<sup>262</sup> During the late 1990s, a number of large PCOs, including OpTel, SkyView, and Cable Plus, declared bankruptcy.<sup>263</sup> OpTel, one of the largest PCOs, has emerged recently from Chapter 11

<sup>255</sup> Larry Kessler, *Boring? Nor Any More Exclusive and Perpetual Contracts*, Private and Wireless Broadband, December 2001, at 18.

<sup>256</sup> Jay Hanz, *Post Wiring Properties for Broadband Connectivity: Keeping up With Resident Demands*, Broadband Properties, April 2002, at 12.

<sup>257</sup> 1996 Act, sec. 301(a)(2), 47 U.S.C. § 522(7). In addition, private cable and SMATV operators (a) do not pay franchise and Federal Communications Commission subscriber fees; (b) are not obligated to pass every resident in a given area; (c) are not subject to rate regulation; and (d) are not subject to must carry and local government access obligations. 1997 *Reporr*, 13 FCC Rcd at 1085.

<sup>258</sup> *Id.* In 1991, the Commission held that microwave transmissions do not "use" public rights-of-way and made 18 GHz technology available for the point-to-point delivery of video programming services, allowing operators to free themselves from large networks of coaxial or fiber optic cable and amplifiers. *Amendment of Part 94 of the Commission's Rules to Permit Private Video Distribution Systems of Video Entertainment Access to the 18 GHz Band*, 6 FCC Rcd 1270, 1271 (1991). In 2000 the Commission adopted a *Report and Order* affirming the allocation of the 18 GHz band for SMATV providers, concluding that "private cable operators using the 18 GHz band, for both current and future operations, will not be able to compete effectively against franchised cable operators if we redesignate the 18.3-18.55 GHz band . . . ." See *Redesignation of the 17.7-19.7 GHz Frequency Band Blanket Licensing of Satellite Earth Stations in the 17.2-20.2 GHz and 27.5-30.0 GHz Frequency Bands and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite Service Use*, 15 FCC Rcd at 13450 (2000).

<sup>259</sup> *Entertainment Connections, Inc., Motion for Declaratory Ruling*, 13 FCC Rcd at 14277 (1998).

<sup>260</sup> *Amendment of Eligibility Requirements in Part 78 Regarding 12 GHz Cable Television Relay Service*, 17 FCC Rcd 9930 (2002).

<sup>261</sup> See, e.g., OpTel, Inc., Comments, CS Docket No. 99-250, at 2-3; RCN Telecom Service, Inc., Comments CS Docket No. 99-250, at i, 3-4.

<sup>262</sup> For a list of private communications operators, see the Independent Multi-Family Communications Council's web site under Private Communication Operator ("PCO") at <http://www.imcc-online.org/membership>.

<sup>263</sup> Larry Kessler, *Winning the Battle and the War. What Does It Take?* Private and Wireless Broadband, July 2000, at 10.

bankruptcy under the name TVMAX.<sup>264</sup> Many PCOs serve approximately 3,000-4,000 subscribers, but the larger operations serve as many as 15,000-55,000 subscribers each.<sup>265</sup> As of June 2002, PCO subscribership increased by 100,000 subscribers, reaching 1.6 million subscribers, or 1.7% of the MVPD market.<sup>266</sup>

78. The Commission has issued a **Second Further Notice of Proposed Rulemaking** seeking comments on the advantages and disadvantages of exclusive and perpetual contracts in promoting a competitive environment, and whether there are circumstances in which the Commission should adopt restrictions on exclusive and perpetual contracts in order to promote competition in the MDU market.<sup>267</sup> In that pending proceeding, PCOs, real estate interests, and some telecommunications entities support exclusive contracts for video programming services, asserting that exclusives enable alternative MVPDs to gain a foothold in the MDU market, and enable alternative and new MVPDs to obtain financing, recoup costs, and expand operations in the MDU market.<sup>268</sup> The Independent Multi-Family Communications Council ("IMCC"), the trade organization representing PCOs, states that exclusive contracting by PCOs is essential to their ability to compete with franchised cable operators and should not, therefore, be capped.<sup>269</sup> If caps are adopted, IMCC and other PCO advocates endorse long-term caps of ten to 15 years.<sup>270</sup> IMCC urges the Commission however, to implement rules that would allow property owners to renegotiate or reject perpetual contracts so that residents can enjoy the benefits of service from competing providers.<sup>271</sup>

#### E. Broadcast Television Service

79. Broadcast networks and stations supply video programming over the air directly to consumers who do not subscribe to an MVPD service. Some consumers receive broadcast signals via over-the-air transmission whereas others receive signals via their cable, DBS, or other MVPD service. Since the **2001 Report**, the number of commercial and noncommercial television stations increased to 1,712 as of June 30, 2002, from 1,678 as of June 30, 2001.<sup>272</sup> The recession of 2001 affected total television broadcast advertising revenues, which declined to \$35.9 billion in 2001, a 12% decrease from

<sup>264</sup> Larry Kessler, *Santa or the Grinch Who's Visiting You Next?* Broadband Properties, January 2002, at 18.

<sup>265</sup> *1999 Report*, 15 FCC Rcd at 1023. See also *Ten Largest Private Cable Operators/Multiple System Operators*, Private Cable & Wireless Cable, Dec. 1999, at 4.

<sup>266</sup> NCTA Comments at 12.

<sup>267</sup> *Telecommunications Services Inside Wiring, Customer Premises Equipment, Implementation of the Consumer Protection and Competition Act of 1992: Cable Home Wiring*, Repon and Order and Second Further Notice of Proposed Rulemaking ("Inside Wiring Order"), 13 FCC Rcd 3659 (1997). A perpetual contract runs for the term of a cable franchise and any extensions thereof. Exclusive contracts specify that only a particular MVPD, and no other, may provide video programming and related services to residents of an MDU.

<sup>268</sup> Community Associations Institute Comments in CS Docket No. 95-184, at 2; Wireless Cable Association Comments in CS Docket No. 95-184, at 1-8; Real Estate Alliance *Ex Parte* in CS Docket No. 95-184, May 24, 2000, at 1-3; Building Owners and Managers Association International Further Joint Comments in CS Docket No. 95-184, Intelicable *Ex Parte* in CS Docket No. 95-184, June 16, 2000, at 1-3; OpTel Comments at 4-6; CTE Comments in CS Docket No. 95-184, at 3. See ¶¶ 120-122 *infra*.

<sup>269</sup> IMCC Comments in CS Docket No. 95-184 at 4.

<sup>270</sup> *Id.* at 4-9.

<sup>271</sup> *Id.* at 11.

<sup>272</sup> Compare Federal Communications Commission, *Broadcast Station Totals as of June 30, 2002*, FCC News Release (Aug. 26, 2002) with Federal Communications Commission, *Broadcast Station Totals as of June 30, 2001*, FCC News Release (July 13, 2001).

\$40.8 billion in 2000.<sup>273</sup> Advertising revenues for the seven most widely distributed broadcast networks (ABC, CBS, Fox, NBC, PAX, UPN, and WB) fell 8% from \$20.3 billion in 2000 to \$18.6 billion in 2001.<sup>274</sup> In contrast, cable programming networks experienced a 3.8% increase in advertising revenue in 2001, earning \$10.7 billion in advertising revenue compared to \$10.3 billion in 2000.<sup>275</sup>

80. During the 2001-2002 television season,<sup>276</sup> broadcast television stations,<sup>277</sup> accounted for a combined average 58.9 share of prime time viewing among all television households,<sup>278</sup> compared to 63 share in the previous season.<sup>279</sup> For total day (24-hour) viewing, broadcast television stations accounted for a combined 52.4 share of viewing in all TV households, also down from a 56.2 share the previous season. During the 2001-2002 television season, non-broadcast networks,<sup>280</sup> accounted for a combined average 57 share of prime time viewing among all television households, up from 52.6 share the previous season. For total day (24-hour) viewing, cable networks accounted for a combined 58.8 share of viewing in all TV households, also up from a 54.7 share last season.

81. We previously reported on consolidation in the broadcast industry and on “repurposing,” which continues to become more common. Repurposing deals between NBC and PaxTV, ABC with Lifetime and VH-I and Fox with FX were reported in last year’s report. This season, Fox and Warner Bros. have struck repurposing deals with MTV; Disney is repurposing ABC sitcoms on its ABC Family network; NBC is experiencing success with first run *Law and Order* and *Criminal Intent* rebroadcasts on USA network; and Comedy Central rebroadcasts NBC’s *Late Night with Conan O’Brien* the next day at 1 p.m. and 7 p.m.<sup>282</sup> In reverse examples of repurposing, NBC is showing episodes of Court TV’s original *Forensic Files* and ABC is airing USA network’s *Monk* on Monday nights after USA airs it on Friday.<sup>283</sup>

82. As we previously reported, DTV could enhance the ability of broadcasters to compete in the video marketplace. DTV allows broadcasters to transmit an HDTV signal, several standard definition television (“SDTV”) signals (“multicasting”), or ancillary services in addition to video programming.<sup>284</sup> As of September 25, 2002, two of the top-four network affiliates in the top ten television markets were broadcasting DTV service.<sup>285</sup> In television markets 11-30, 75 of 79 stations were broadcasting DTV

<sup>273</sup> Television Bureau of Advertising, *Local Broadcast Revenues Off Last Year* (press release), Apr. 17, 2002.

<sup>274</sup> *Id.*

<sup>275</sup> NCTA, *Cable Advertising Revenue: 1984-2001 (In Millions)*, Cable Television Developments 2002, at 12.

<sup>276</sup> September 2001 to August 2002

<sup>277</sup> Includes network affiliates, independent stations, and public broadcast stations

<sup>278</sup> See fn. 39 *supra*

<sup>279</sup> Nielsen Media Research, *Primetime: Total US Ratings By Viewing Source September 2001-August 2002*, Oct. 2002; Nielsen Media Research, *Total Day 24 Hours 6 am - 6 am: Total US Ratings By Viewing Source September 2000-August 2001*, Oct. 2001.

<sup>280</sup> Includes basic (BST and CPST) networks, as well as premium and PPV networks, distributed by MVPDs.

<sup>281</sup> 2001 Reporr. 17 FCC Rcd at 1283 (2002). “Repurposing” generally involves a re-run of broadcast content on a different network (cable or broadcast) shortly after it airs originally on network affiliate stations.

<sup>282</sup> Paige Albiniak, Steve McClellan and Dan Trigoboff, *A Season of Seeing Double*, BROADCASTING & CABLE, Sept. 30, 2002, at 7.

<sup>283</sup> *Id.*

<sup>284</sup> See 2001 Report, 17 FCC Rcd at 1283

<sup>285</sup> For an updated list on the status of DTV broadcasts, see *Summary of DTV Applications Filed and DTV Build Out Status*, at <http://www.fcc.gov/mb/video/files/dtvonairsum.html>.

service. Ninety percent of the more than 1,300 commercial television stations have been granted a DTV construction permit or license, and 643 are on the air with DTV operation.<sup>286</sup>

83. Current use of DTV spectrum involves HDTV transmissions of programs that are also broadcast in standard NTSC analog format over paired analog facilities.<sup>287</sup> For instance, ABC is broadcasting all of its prime time scripted series and theatrical movies in HDTV during the 2002-2003 TV season.<sup>288</sup> CBS states that each of its 18 prime time dramas and comedies are broadcast in HDTV in partnership with digital television set manufacturers Samsung and Zenith.<sup>289</sup> NBC broadcasts ten prime time shows in HDTV, and PBS offers one or two HDTV programs per week.<sup>290</sup> The WB network offers four HDTV programs this season.<sup>291</sup>

84. In *Compatibility Between Cable Systems and Consumer Electronics Equipment*, the Commission directed the cable and consumer electronics industries to report every six months until October 2002 on the progress implementing the February 2000 Program and System Information Protocol ("PSIP") agreement between NCTA and the Consumer Electronics Association ("CEA").<sup>292</sup> Recently, an extension was granted for the filing of the October 2002 progress reports based on the representations of the cable and consumer electronics industries that they were engaged in constructive discussions regarding compatibility between cable systems and digital television sets, and filing the reports would detract from that effort.<sup>293</sup>

85. It has been alleged that the lack of a comprehensive copy protection regime also has slowed the DTV transition. Since 1996, an inter-industry group called the Copy Protection Technical Working Group ("CPTWG") has served as a discussion forum for general copy protection issues. On November 28, 2001, the Broadcast Protection Discussion Subgroup ("BPDG") was formed under the auspices of CPTWG in order to specifically address digital broadcast copy protection. The BPDG recently announced a consensus on the use of a "broadcast flag" standard for digital broadcast copy protection. This consensus would require use of the Redistribution Control Descriptor, as set forth in ATSC Standard A/65A (the "ATSC flag"), to mark digital broadcast programming so as to limit its improper use. Despite the consensus reached on the technical standard to be implemented, final agreement has not been reached on compliance requirements, enforcement mechanisms, or criteria for approving the use of specific protection technologies in consumer electronics devices. On August 8, 2002, the Commission adopted a *Notice of Proposed Rule Making* to explore whether it could and should mandate use of the "broadcast-flag" or some other copy protection mechanism for DTV to protect digital broadcast content from unauthorized copying and redistribution.<sup>294</sup>

<sup>286</sup> *Id.* While over 600 stations are providing a DTV signal, many consumers within those service areas are unable to view the DTV format either because they do not have DTV receivers or because they are subscribers to a MVPD that does not carry the DTV signal.

<sup>287</sup> In his *Voluntary DTV Plan*, Chairman Powell requested that the four largest broadcast networks (i.e. ABC, CBS, Fox, and NBC) provide HDTV, or other "value-added DTV programming," during at least 50% of their prime time schedules beginning with the 2002-2003 season. See fn. 119 *supra*.

<sup>288</sup> *Mass Media*, Comm. Daily, Aug. 29, 2002, at 6.

<sup>289</sup> *HD News*, CableFax Daily, Aug. 29, 2002, at 4.

<sup>290</sup> See <http://www.nbc.com/nbc/footer/FAQ.shtml>; see <http://www.pbs.org/digitaltv/dtvsched.htm>

<sup>291</sup> *Networks to Air More Shows in HDTV*, USA TODAY, Sept. 29, 2002, at D1

<sup>292</sup> Report and Order, 15 FCC Rcd 17568 (2000). See also *2001 Report*, 17 FCC Rcd at 1284.

<sup>293</sup> Letter from W. Kenneth Ferree, Chief, Media Bureau to Michael Petricone, Consumer Electronics Association and Neil Goldberg, National Cable and Telecommunications Association. PP Docket No. 00-67 (Nov. 21, 2002).

<sup>294</sup> *Digital Broadcast Copy Protection*, 17 FCC Rcd 16027 (2002).

86. In 2001, the Commission adopted rules resolving a number of technical and legal matters related to the cable carriage of digital broadcast signals. In its *Report and Order*, it noted that MSOs are currently undertaking significant cable system upgrades, including digital build-outs.” It stated that a commercial or noncommercial digital-only television station can immediately assert its right to carriage on a cable system. The Commission also said that a television station that returns its analog spectrum and converts to digital operation must be carried by cable systems. The Commission stated that Section 614(b)(4)(A) of the Communications Act of 1934, as amended by the 1996 Act,<sup>296</sup> requires that cable operators shall provide the same “quality of signal processing and carriage” for broadcasters’ signals as they provide for any other type of signal. A broadcast signal delivered in HDTV must be carried in HDTV.<sup>297</sup> The *Report and Order* also contains an initial determination that the requirement for cable operators to carry “primary video” refers to a single digital programming stream and “program-related” content.”\* Petitions to reconsider this decision are currently before the Commission.

87. CEA reports the sale of DTV products is gaining momentum. DTV unit sales for the year 2002 through September totaled near 1.6 million, 83% higher than for the same period in 2001.<sup>299</sup> As a result, broadcasters continue to engage in tests of various DTV products, such as HDTV, multiple SDTV services, ancillary services, or some combination.<sup>300</sup> It is difficult to assess the competitive impact of DTV service on the MVPD market at this time, other than to observe that the potential for a positive competitive impact remains.

#### F. Other Entrants

##### 1. Internet Video

88. In addition to the more traditional video services, video programming also is provided over the Internet. In some cases, the video is available only for downloading onto a computer hard drive for later viewing, and in other cases, it is provided in real-time (also known as “streaming video”). Broadcast-quality streaming video service requires a high-speed broadband connection of about 300 Kbps or higher, and high-speed Internet access still is limited. With just over 14 million broadband subscribers as of June 2002,<sup>301</sup> Furthermore, most Internet video content currently available has been intentionally degraded to facilitate streaming at 56 Kbps or slower, so that dial-up access users can download it.<sup>302</sup>

89. Nevertheless, the number of homes with access to the Internet continues to grow, and many of those continue to access video content via the Internet. As of the June 2002, an estimated 54 million Americans subscribed to either a dial-up or a broadband Internet access service, compared with 50 million

<sup>295</sup> *Carriage of Digital Television Broadcast Signals* (“DTV Must Carry Order”), 16 FCC Rcd 2598 (2001)

<sup>296</sup> *Id.*; see also 41 U.S.C. § 534

<sup>297</sup> See DTV Must Carry Order.

<sup>298</sup> *Id.*

<sup>299</sup> CEA, *September DTV Products Sales Make New Record* (press release), Oct. 10, 2002. Factory to dealer sales of DTV units are projected to over four million units for 2003. See <http://www.ce.org/publications/vision/janfebmar2002/p03b.asp>.

<sup>300</sup> See 2001 *Report*, 17 FCC Rcd at 1285

<sup>301</sup> Richard Biloni, Benjamin Swinburne, Megan Lynch, *Truth, Lies and Truck Rolls: Understanding Product Profitability*, Morgan Stanley, October 4, 2002, at 46-7.

<sup>302</sup> Matthew York, *A New Way to Share Video*, Videomaker, Jan. 2002, at <http://www.findanicles.com>. The maximum speed of an analog telephone dial-up modem is currently 56 Kbps.

as of June 2001.<sup>303</sup> Additionally, as of July 2002, approximately 51% of those online have accessed streaming audio or video at least once before, and 23% of those online have accessed streaming audio or video within the last month.<sup>304</sup> These usage patterns are similar to those observed the previous year.”

90. Today, most Internet video that is widely distributed is shorter in length than traditional television programming. **As** we have reported in the past, many traditional television programmers continue to offer Internet video versions of their programming.<sup>306</sup> Sports and news programming remain the most common categories of streaming video programming currently available over the Internet, but other genres of video programming (e.g., comedy, drama, informational) are also available. **As** the technology improves, and access to such technologies increases, we expect the type and amount of video available over the Internet will increase as well.

## 2. Home Video Sales and Rentals

91. The sale and rental of home video, including videocassettes, DVDs, and laser discs, are part of the video marketplace because they provide services similar to the premium and pay-per-view offerings of MVPDs.<sup>307</sup> **As** such, they offer some level of competition to DBS, broadcast television and cable television for the consumer's time and money. Cable video-on-demand also is an emerging competitive service to home video.”

92. Approximately 93 million U.S. households, or about 90% of all households, have at least one VCR, with nearly 46 million households owning at least two VCRs.<sup>309</sup> By the end of 2001, the number of homes with DVD players reached approximately 13.7 million, and it is estimated that over 26 million homes will have DVD players by the end of 2004.<sup>310</sup> In addition, about two million homes have laser disc players.<sup>311</sup> U.S. consumers are expected to spend over \$26 billion renting and buying prerecorded video in 2002, almost a 17% increase over the \$22.5 billion spent in 2000.<sup>312</sup> Total rental revenue is projected at \$1.4 billion for 2002 compared to \$10.9 billion in 2000, an increase of 4.4%.<sup>313</sup> Total revenue from video sales is a projected \$14.8 billion in 2002, up from \$11.6 billion in 2000, an

<sup>303</sup> Richard Biloni, Benjamin Swinburne, Megan Lynch, *Truth, Lie, and Truck Rolls: Understanding Product Profitability*, Morgan Stanley, October 4, 2002, at 46-7.

<sup>304</sup> Arbitron, Inc., *Arbitron Internet Y. The Media and Entertainment World of Online Consumers*, Sept. 5, 2002, at <http://www.arbitron.com>.

<sup>305</sup> See 2001 Report, 17 FCC Rcd at 1285.

<sup>306</sup> *Id.* at 1286-87.

<sup>307</sup> See, e.g., 2001 Report, 17 FCC Rcd at 1288. See also *Competition, Rare Regulation and the Commission's Policies Relating to the Provision of Cable Service*, 5 FCC Rcd 4962, 5019-20 (1990). See also Comcast Reply Comments at 16 (citing newspaper stories quoting consumers who say they use DVD subscription services, such as Netflix, instead of buying pay-per-view movies from an MVPD or otherwise watching television).

<sup>308</sup> See ¶¶ 39-41 *supra*.

<sup>309</sup> *Mass Media*, Comm. Daily, Aug. 18, 2002 at 7. Other sources provide alternative estimates of VCR penetration ranging from approximately 85% to 95% of all television households. See, e.g., Frank Ahrens and Dina El Boghdady, *It's the Final Reel for the VCR*, WASHINGTON POST, June 21, 2002, at A1.

<sup>310</sup> Veronis Suhler, Communications Industry Forecast 2001 (“Veronis Suhler”), at 6, 18, 192, and 194.

<sup>311</sup> Tom Shales, *Shall We Dance? With DVD, Indeed*, WASHINGTON POST, June 2, 1999, at C1.

<sup>312</sup> Veronis Suhler at 192 and 194.

<sup>313</sup> *Id.*

increase of 13%.” By the end of 2002, DVDs will have increased their share of the video rental and sales markets to 34%, up from about 20% in 2000.<sup>315</sup>

93. As reported last year, the home video sales and rental industry is considered competitive, with almost 20,000 video specialty stores selling or renting home video programming.<sup>316</sup> There also are more than 8,000 retail outlets, primarily supermarkets and drug stores that rent videos.” In addition, mass merchandise stores (e.g., Wal-Mart and Target) and electronics chain stores (e.g., Best Buy and Circuit City) compete with specialty video stores in the sale of videos.<sup>318</sup> In recent years, the home video sales and rental industry has undergone a period of consolidation, with many independent operators selling to larger retail outlets or closing their businesses.<sup>319</sup> The Internet also has become a source for video rentals<sup>320</sup> and sales.”

94. Another home video technology is the personal video recorder (“PVR”).<sup>322</sup> This device is capable of pausing, recording and rewinding live TV in digital form on an internal hard drive instead of videotape. It also has the capacity to record as much as 60 hours of programming, outperforming the average six-hour videotape tenfold.” One source reports that more than one million homes have PVRs, and that number will grow to 15 million homes in five years.” There are several companies offering PVRs, including SonicBlue, TiVo, Inc., and Microsoft. SonicBlue, maker of the ReplayTV line of PVRs, is offering a service option of \$9.95 monthly or a one-time service fee of \$250 to use its units. That is in addition to the box purchase, which ranges from about \$400 to \$1300.<sup>325</sup> TiVo, with about 460,000 subscribers, is working on adding digital music capabilities and technologies that allow TiVo boxes to organize and display digital-photo collections. TiVo plans to offer AOL’s instant-messaging service and TV-based party games.<sup>327</sup> TiVo service costs \$12.95 a month or a \$250 lifetime subscription.<sup>328</sup> PVR functionality also is included in the set-top boxes of some MVPDs. DirecTV offers a combination DBS

<sup>314</sup> *Id.*

<sup>315</sup> *Id.*

<sup>316</sup> See 2001 Report, 17 FCC Rcd at 1289.

<sup>317</sup> *Id.*

<sup>318</sup> *Id.*

<sup>319</sup> *Id.* at 1290.

<sup>320</sup> For example, for a monthly fee of \$20, Netflix allows consumers to rent DVDs from its Internet site, with the movies sent to the consumer and returned to the company through the mail. Over half a million people have signed up for this service. See Leslie Walker, *Movies by the Mail*, WASHINGTON POST, Apr. 11, 2002, at E1. In addition, consumers in several markets can search Blockbuster’s inventory over the Internet and reserve videos online before going to the store to pick them up. See <http://www.blockbuster.com>.

<sup>321</sup> For example, Best Buy and Amazon.com sell video programming through their Internet sites. See <http://www.bestbuy.com> and <http://www.amazon.com>. Express.com is limited to the sales of DVDs. See <http://www.express.com>.

<sup>322</sup> These devices also are referred to as Digital Video Recorders (“DVRs”).

<sup>323</sup> Daniel Greenberg, *Giving Your Television a Bruin*, WASHINGTON POST, June 6, 2002, at H7.

<sup>324</sup> See *Muss Media*, Comm. Daily, June 23, 2002 at 8.

<sup>325</sup> See *ReplayTV Adds Monthly Fee Option*, Multichannel News Day, Aug. 30, 2002, at 2.

<sup>326</sup> See *TiVo Narrows Loss*, Multichannel News Day, Aug. 23, 2002, at 1.

<sup>327</sup> Daniel Greenberg, *Giving Your Television a Brain*, WASHINGTON POST, June 2, 2002, at H7.

<sup>328</sup> *Id.*

receiver/digital VCR, based on TiVo's digital technology.<sup>329</sup> In addition, EchoStar offers set-top boxes, the DISHPVR 5011508 and DishPVR 721, with varying PVR capabilities.<sup>330</sup> Approximately 40% of new EchoStar subscribers purchase a PVR capable set-top receiver."<sup>331</sup>

#### G. Local Exchange Carriers

95. The 1996 Act amended Section 651 of the Communications Act in order to permit telephone companies to provide video services in their telephone service areas. According to the statute, common carriers may: (1) provide video programming to subscribers through radio communications under Title III of the Communications Act;" (2) provide transmission of video programming on a common carrier basis under Title II of the Communications Act;" (3) provide video programming as a cable system under Title VI of the Communications Act;" or (4) provide video programming by means of an open video system ("OVS").<sup>335</sup>

96. As reported last year, the four largest incumbent LECs have largely exited the traditional cable service business."<sup>336</sup> BellSouth alone continues to operate some overbuild cable systems.<sup>337</sup> Thus, LEC-operated wireline MVPD service is not a widespread competitor to cable. A number of smaller incumbent LECs, however, are offering, or preparing to offer, MVPD service over existing telephone lines. Smaller incumbent LECs, in individual communities, may offer competition to incumbent cable providers.

97. ***In-Region Cable Franchises.*** Three of the four largest incumbent LECs have shut down or sold their in-region cable franchises.<sup>338</sup> The exception is BellSouth, which currently holds 20 cable

<sup>329</sup> The unit sells for \$199, and the monthly fee DirecTV will charge will be \$4.99, or half the regular TiVo subscription fee, for customers subscribing to Total Choice and Total Choice Plus packages, \$31.99 per month and \$35.99 per month, respectively, and no charge for customers subscribing to the Total Choice Premier package, which is \$81.99 per month. See DirecTV Inc., at <http://www.directv.com/DTVAPP/imagine/TIVO.jsp>. See also *DirecTV Pusher Play on New TiVo Box*, SATELLITE BUSINESS NEWS, Aug. 9, 2002, at 2.

<sup>330</sup> See EchoStar Communications Corp., at <http://www.dishnetwork.com/content/technology/receivers/index.shtml> (visited Nov. 13, 2002).

<sup>331</sup> Duffy Hayes, *f VR in Satellite's Sights. Is It in Cable's?*, CED MAGAZINE, July 2002, available at <http://www.cedmagazine.com/ced/2002/0702/id6.htm>.

<sup>332</sup> 47 U.S.C. § 571(a)(1).

<sup>333</sup> 47 U.S.C. § 571(a)(2).

<sup>334</sup> 47 U.S.C. § 571(a)(3).

<sup>335</sup> 47 U.S.C. § 571(a)(3)-(4).

<sup>336</sup> 2001 Report, 17 FCC Rcd at 1291. Some of the four largest LECs are, however, offering bundles of telecommunications service which include resold DBS service. See, e.g., Jon Van, *SBC Looks for Joy in Bundled Services*, CHICAGO TRIBUNE, Nov. 18, 2002.

<sup>337</sup> In the 2001 Report, the Commission reposed that BellSouth was "reselling DBS service." BellSouth was not at that time nor is it now reselling any DBS service. BellSouth was merely transitioning its MMDS customers to EchoStar or other video providers in connection with the restructuring of its MMDS business. See 2001 Report, 17 FCC Rcd at 1250, 1291.

<sup>338</sup> 2001 Report, 17 FCC Rcd at 1291-2. Verizon, which inherited systems in California and Florida when it purchased CTE, is attempting to sell those properties. Verizon entered into purchase contracts with Adelphia to sell its video properties. Because of Adelphia's financial difficulties, however, some of those agreements were cancelled and some are now subject to litigation. E-mail from Clint E. Odorn Director, Federal Regulatory Affairs, Verizon Communications, Inc., Nov. 21, 2002.



franchises with the potential to pass 1.4 million homes. and provides cable service in 14 of its franchise areas. This is unchanged from last year.”

98. **VDSL.** Qwest Communications International offers video, high-speed Internet access and telephone service over existing copper telephone lines using very high-speed digital subscriber line (“VDSL”) in Omaha, Nebraska; Phoenix, Arizona; and Boulder and **Highlands Ranch, Colorado.**<sup>340</sup> Small LECs continue to deploy VDSL, although deployment has slowed in the face of financial difficulties in the telecommunications industry and the economy as a whole. Forty-five LECs, mostly small, are using VDSL technology to offer video and data, with roughly 108,000 video subscribers, a growth of 8,000 subscribers in the last year.” For example, Hometown Online, Inc., a subsidiary of Warwick Valley Telephony Company, offers digital video service using VDSL in several communities on the New York-New Jersey border.<sup>342</sup> We previously reported on companies investigating deployment of video over the lower bandwidth asymmetric digital subscriber line service (“ADSL”),<sup>343</sup> but this appears to remain in the trial stage.”

#### H. *Electric and Gas Utilities*

99. Electric and gas utilities possess some assets, such as access to public rights of way, existing telecommunications facilities, and existing relationships with customers, that appear to make them potential entrants into the MVPD market. Some utilities continue to move forward with ventures involving multichannel video programming distribution. As with LECs, however, utilities are not yet widespread competitors in the telecommunications or cable markets. Mainly, it appears that utilities will provide MVPD competition in scattered localities. This is potentially most beneficial in rural areas where cable operators and telephone companies may not be willing or able to provide the full range of advanced telecommunications services.<sup>345</sup>

100. Some utilities build systems on their own, and others enter joint ventures with other companies. Starpower, a joint venture between RCN and Potomac Electric and Power Company (“PEPCO”) in the Washington, D.C., area, offers competitive cable, telephone, and data services. It serves 23,780 customers and reportedly has spurred competitive responses from the incumbent cable

<sup>339</sup> E-mail from Rick DeTurk, Manager – Regulator!, BellSouth Corp., Oct. 21, 2002. The active franchises are located in: Vestavia Hills, Alabama; St. John’s County, Miami-Dade County, Davie, and Pembroke Pines, Florida; Counties of Cherokee, Cobb, DeKalb, and Gwinnett and Cities of Chamblee, Duluth, Lawrenceville, Roswell, and Woodstock, Georgia.

<sup>340</sup> NCTA Comments at 22. See also <http://www.qwest.com/vdsl/>.

<sup>341</sup> E-mail from Roger Bindl, Director, Engineering & Consulting Companies, Next Level Communications, Oct. 6, 2002.

<sup>342</sup> See, generally, Hometown Comments. Hometown reopens difficulty with acquiring programming and difficulty dealing with local and state regulatory agencies, and states that this indicates a need for federal intervention to open the market to competition.

<sup>343</sup> 2001 Report, 17 FCC Rcd at 1292-3

<sup>344</sup> E-mail from Roger Bindl, Director, Engineering & Consulting Companies, Next Level Communications, Oct. 6, 2002.

<sup>345</sup> For instance, Kutztown, Pennsylvania, is building a fiber-to-the-home system to offer its 2,230 residents a complete package of advanced telecommunications services. The municipal utility states that the efficiencies that come from owning an existing network and the equipment necessary to maintain the network will allow the utility to offer service where others are unable. Man Stump, Kutztown, Pa., *Muni Has Lots of Fiber*, Broadband Week, Mar. 25, 2002. Cable competitors contend, however, that these municipal overbuilds often achieve lower prices or offer more advanced services by subsidizing their rates with revenues from their utility operations. See, e.g., *Municipalities Seek Greater Role in Rural Broadband Rollout*, Comm. Daily, Jan. 16, 2002, at 5-6.

provider.<sup>346</sup> Siegemcom is offering bundled video, voice, and data services in Evansville and Newburg, Indiana, as does Seren Innovations in St. Cloud, Minnesota and Contra Costa County, California.” Everest Connections Communications Corporation and Ex-Op of Missouri, Inc., collectively owned by the energy company Aquila, Inc., offer more than 300 channels of cable service and high-speed Internet service in Lenexa, Shawnee, and Overland Park, Kansas, and Kansas City and Keamey, Missouri.<sup>348</sup>

101. The American Public Power Association (“APPA”) performed a survey of its members at the end of 2001, finding that 450 public power systems offer some kind of broadband services. Of those, 91 offered video service, 59 cable modem service, and 29 local telephone service.<sup>349</sup>

## I. Broadband Service Providers, Open Video Systems, and Overbuilders

102. Last year we addressed a new class of providers, BSPs.<sup>350</sup> BSPs attempt to overcome the historical difficulties of overbuilding by building state-of-the-art systems in communities with favorable demographics and by offering bundles of services to increase per subscriber revenue and decrease churn. Even with this strategy, as we reported last year, BSPs face considerable challenges.<sup>351</sup> BSPs cite “significant barriers to entry” (discussed below) as well as “the current telecommunications industry recession and the limited capital markets” as factors causing BSPs to curtail growth and investment plans.<sup>352</sup>

103. RCN is the largest BSP in the country, and the 13<sup>th</sup> largest MVPD. For the year ending June 30, 2002, RCN’s revenue increased by 22%; its number of marketable homes increased by eight percent to 1.5 million; and the number of network connections increased by 22% to almost one million.” At the end of June 30, 2002, RCN reported a total of 506,700 video subscribers.” This year, RCN introduced a “supercharged” cable modem service, with download speeds of up to three megabits per second, double the speeds of standard cable modem and ADSL service.<sup>353</sup> Like all BSPs, however, RCN has experienced trouble acquiring financing and, as a result, has scaled back expansion plans and focused

<sup>346</sup> BSPA Comments at 24.

<sup>347</sup> NCTA Comments at 22.

<sup>348</sup> Utilicorp Comments at 1.

<sup>349</sup> APPA, *Public Power: Powering the 21<sup>st</sup> Century with Community Broadband Services* (fact sheet), June 2002.

<sup>350</sup> “Broadband service provider” is the term used by these new entrants to describe the range of services they offer and is not intended to imply anything with respect to Commission policy or proceedings that might involve broadband services. Usually, these services can be purchased separately as well as in a bundle. We have defined “broadband providers” as, “newer firms that are building state-of-the-art facilities-based networks to provide video, voice and data services over a single network.” 2001 Report, 17 FCC Rcd at 1294.

<sup>351</sup> 2001 Report, 17 FCC Rcd at 1295.

<sup>352</sup> BSPA Comments at iv.

<sup>353</sup> RCN Corp., *RCN Announces Second Quarter 2002 Results* (press release), Aug. 7, 2002. The number of “marketable homes” consists of homes passed minus households inaccessible due to other constraints such as inability to enter an MDU. The number of “network connections” counts each service received as one network connection. Thus, a household that signs up for video, local telephone, and high-speed Internet access service counts as three network connections. Long distance service is not counted as a separate network connection.

<sup>354</sup> *Id.* The current number of video subscribers is 80,000 less, because RCN sold incumbent cable systems it owned in August. RCN Corp., *RCN to Receive \$245 Million for Non-Strategic New Jersey Cable Systems* (press release), Aug. 27, 2002.

<sup>355</sup> RCN Corp., *RCN Launches “Super-Charged” High-Speed Internet Access Service in Company’s San Francisco and Los Angeles Markets* (press release), July 2, 2002.

on marketing to existing passed homes.<sup>356</sup> With these changes, RCN has been successful in reducing expenditures and is narrowing its losses.<sup>357</sup>

104. **WideOpenWest** ("WOW") is the second largest overbuilder.<sup>358</sup> WOW is the 15<sup>th</sup> largest MVPD and, as of June 2002, served 310,000 subscribers.<sup>359</sup> WOW serves 107 communities in Colorado, Indiana, Illinois, Michigan, and Ohio.<sup>360</sup> WOW suspended build-out commitments due to financial difficulties.<sup>361</sup> The third largest BSP is Knoxville, Tennessee-based Knology, which operates in the Southeast. As of June 2002, Knology was the 28<sup>th</sup> largest MVPD, and had 124,700 video subscribers, a 12% increase over the previous year.<sup>362</sup> As with other BSPs, Knology experienced financial troubles in the last year, and filed a pre-packaged Chapter 11 bankruptcy that allows it to continue service uninterrupted.<sup>363</sup> Grande Communications merged with Clearsource, another overbuilder in July 2002, and now has 42 franchises in Texas.<sup>364</sup> Western Integrated Networks ("WIN") was serving Sacramento and building its system there, but subsequently suspended its activities in March 2002. It declared bankruptcy and was acquired by SureWest Communications, which plans to continue construction of the system.<sup>365</sup>

105. In total, BSPA reports that its members serve over one million subscribers. They compete with incumbent cable operators, other MVPDs, and with incumbent LECs and competitive

<sup>356</sup> See, e.g., TR Daily, *RCN Corp. in Talks with Bank Lenders, Forecasts Reined-In Business Plan*, Feb. 8, 2002, at <http://www.tr.com/online/trd/2002/td020802/index.html>; Kathy Berpen, *RCN's Cable Future Looks Fuzzy*, CHICAGO TRIBUNE, Mar. 15, 2002, at <http://www.chicagotribune.com/business/chi-0203150373mar15.story?coll=chi%2Dbusiness%2Dhed>; TR Daily, *RCN Amended Bank Lines Tapped Out, But Cash Holdings Still Total \$650M*, Mar. 26, 2002, at <http://www.tr.com/online/trd/2002/td032602/index.html>.

<sup>357</sup> RCN, Corp., *RCN Announces Second Quarter 2002 Results* (press release), Aug. 7, 2002.

<sup>358</sup> WOW acquired many of its subscribers when it purchased Ameritech New Media's overbuild systems. Ameritech's systems are not technically "BSP systems" because they do not provide a bundle of services. See WOW, *WOW Acquires Ameritech's 310,000 Cable TV Subscribers* (press release), Dec. 3, 2001.

<sup>359</sup> Paul Kagan Assoc., Inc., *Top Cable System Operators as of June 2002*, Cable TV Investor, Sept. 30, 2002, at 9-10.

<sup>360</sup> For a full list of communities served, see [http://www.wideopenwest.com/whatwedo\\_avail.html](http://www.wideopenwest.com/whatwedo_avail.html).

<sup>361</sup> CableFAX Daily, *In the States*, Mar. 11, 2002 at 2.

<sup>362</sup> Paul Kagan Assoc., Inc., *Top Cable System Operators as of June 2002*, Cable TV Investor, Sept. 30, 2002, at 9-10. See also Knology, Inc., *Knology Reports Growth in Connections, Revenue and EBITDA* (press release), Aug. 12, 2002. According to its web site, Knology serves cities in Alabama, Florida, Georgia, Tennessee, and South Carolina. For a complete list, see <http://www.knology.com/services/cities.cfm>.

<sup>363</sup> Knology, Inc., *Knology Broadband Proceeds with Reorganization; Operations and Customer Service Will Continue Uninterrupted* (press release), Sept. 18, 2002.

<sup>364</sup> Grande Communications, Inc., *Grande Communications, ClearSource Close Deal to Become One Company* (press release), July 2, 2002. Currently, the company serves parts of Austin, San Marcos, and San Antonio, Texas; see <http://www.grandecom.com/About/construction.jsp>.

<sup>365</sup> SureWest Communications, *SureWest Communications Acquires WINfirst Assets - U.S. Bankruptcy Court Order Issued Wednesday for \$12 Million Acquisition* (news release), July 15, 2002. SureWest owns several telecommunications companies, including the incumbent LEC of a neighboring community, Roseville Telephone. WIN had been awarded a franchise in Los Angeles, and had franchise applications pending in Seattle, Washington; Portland, Oregon; San Francisco and Oakland, California; Las Vegas, Nevada; Phoenix, Arizona; and San Antonio, Austin, Dallas, and Houston, Texas (see 2001 Report, I7 FCC Rcd at 1296), but the SureWest web site makes no mention of building beyond the Sacramento area.

LECs. They have franchises that authorize them to serve over 17 million homes, and have deployed over 32,000 miles of fiber.<sup>366</sup>

106. **Advanced Services.** BSPs are offering advanced services such as VOD. RCN offers VOD throughout its greater Philadelphia service area.<sup>367</sup> In addition to offering SVOD content, Los Angeles-based Altrio Communications is using VOD technology to make voter education information available to residents of Los Angeles County's San Gabriel Valley, including eight information videos on candidates running for Congress and the California Assembly, and on two propositions.<sup>368</sup> Astound Broadband, which operates in Concord, California, Trevoze, Pennsylvania, and St. Cloud, Minnesota, is deploying WorldGate's ITV service to its digital cable subscribers, one feature of which will be "channel hyperlinking" that allows viewers to interact with television programs by instantly linking to and presenting on the TV related web content.<sup>369</sup>

107. **OVS.** BSPs, primarily RCN, continue to be the only significant holders of OVS certifications or local OVS franchises. BSPA reports that "BSPA members typically provide service under traditional cable franchises, although several BSPA members are using OVS for a relatively few number of systems, and others may explore doing so in the future."<sup>370</sup> BSPA states that the court's decision in *City of Dallas v. FCC* allowing cities to require local franchises for OVS operators reduces the attractiveness of OVS.<sup>371</sup> BSPA indicates that members use whatever regulatory regime offers the least resistance to market entry, but that this "is in direct contradiction to the rationale originally underlying the Commission's adoption of the OVS regulations and policies."<sup>372</sup>

108. **Competitive Responses.** In the *Norice*, we requested case study information concerning the effects of actual and potential competition in local markets where consumers have a choice among video programming distributors.<sup>373</sup> Typically these choices are among incumbent cable operators, BSPs and other overbuilders, and DBS operators. BSPA described some cases where the incumbent cable operator faces competition from a new entrant.<sup>374</sup>

109. For example, BSPA states that in Washington, D.C., Starpower provides competitive cable, telephone, and high-speed Internet services to 23,780 subscribers.<sup>375</sup> BSPA notes that after Starpower entered the market Comcast began providing programming which was previously available only through Starpower. According to BSPA, Comcast has invested \$72 million to upgrade its system,

<sup>366</sup> BSPA Comments at iii.

<sup>367</sup> RCN, *RCN Launches Video-On-Demand to Its Entire Greater Philadelphia Service Area* (press release), Sept. 17, 2002. See also Man Stump, *RCN Offers VOD on Comcast's Turf*, Broadband Week, Dec. 24, 2001.

<sup>368</sup> Cable Overbuilder, *Altrio, Offers Voter VOD Service*, InteractiveTV Today, Oct. 28, 2002. See also Altrio Communications, *Altrio Communications Becomes First Competitive Broadband Provider Committed to Deploy Subscription VOD, Chooses StarZ On Demand* (press release), May 30, 2002.

<sup>369</sup> Asround Broadband, *Asround Broadband Launches ITV* (press release), Aug. 28, 2002.

<sup>370</sup> BSPA Comments at 22. The pace of OVS certification filing has slowed significantly this year. We have received only four in 2002, compared to dozens in previous years. For a complete list of OVS certifications, see <http://www.fcc.gov/rnb/ovs/csovsccer.html>.

<sup>371</sup> BSPA Comments at 23. See also *City of Dallas v. FCC*, 165 F.3d 341 (5th Cir. 1999) [No. 96-60502, Jan. 19, 1999].

<sup>372</sup> BSPA Comments at 23.

<sup>373</sup> *Norice*, 17 FCC Rcd at 11579.

<sup>374</sup> Subscriber counts are for the District of Columbia only. See BSPA Comments at 24.

and has significantly upgraded its customer service.” BSPA also relates that in Columbus, Ohio, and Louisville, Kentucky, incumbent, Insight began offering advanced services after competition from WideOpenWest and Knology entered the market, and that it *now* offers VOD on the **lowest** digital tier, thus improving service offerings to customers.<sup>376</sup>

110. **Barriers to Competition.** In addition to difficulties with the OVS regime, BSPs report barriers to competition in the MVPD market. First, BSPA alleges that cable operators are engaging in predatory pricing to answer BSP entry, often in secret, thus purportedly thwarting the Commission’s uniform rate regulations.<sup>377</sup> BSPA also indicates that cable industry trends of horizontal concentration, clustering, and the inapplicability of the Commission’s program access rules to terrestrially-delivered programming increase the possibility that cable operators will foreclose access of BSPs to vital programming owned by cable operators, including essential regional programming.” BSPA contends that “long-term exclusive MDU contracts are pervasive” and that this may interfere with BSPs’ ability to obtain necessary economies of scale, “possibly threatening competitive **entry** into entire geographic markets.”<sup>379</sup> BSPA also charges that incumbent cable operators are denying BSPs access to essential inputs, such as VOD equipment and contractor services for installation, and have attempted to foreclose access to digital set-top boxes.<sup>380</sup>

111. BSPA also reports additional problems in delivering programming to subscribers. BSPA indicates that its members are having problems gaining access to utility poles and to public rights of way so that they can build out their systems.” Utilicorp, which is both a BSP and a utility, also reports

<sup>375</sup> *Id.*

<sup>376</sup> *Id.* at 25-26.

<sup>377</sup> *Id.* at 10-11. We reponed on complaints of similar practices last year. See 2001 Report, 17 FCC Rcd at 1297. We also have resolved or have cases before us concerning predatory pricing. See *Alfrio Communications, Inc. v. Adelphia Communications Corp.*, DA 02-3172 (MB rel. Nov. 15, 2002) (dismissing Alfrio’s uniform pricing and predatory pricing complaint to the presence of effective competition); and *Everest Midwest License, LLC d/b/a Everest Connections Corporation v. Kansas City Cable Partners d/b/a Time Warner of Kansas City*, CSR 5845 (pending complaint for violation of 47 C.F.R. Section 76.984). Reports of alleged predatory pricing have also been made in the press. See, e.g., Kirk Ladendorf, *Time Warner Cable Discounts Draw Fire From City Competitor*, AUSTIN AMERICAN-STATESMAN, Feb. 7, 2002, at A-1; Comm. Daily, *Localities Accuse Cable On ‘Predatory Pricing’ Strategy*, Mar. 4, 2002, at 3-4. Press repons also indicate [hat the Department of Justice is investigating allegations of incumbent cable operator predator? pricing. See Paul Davidson, *Regulators Scrutinize Cable Costs*, USATODAY, Sept. 23, 2002, at [http://www.usatoday.com/money/media/2002-09-22-cable-probe\\_x.htm](http://www.usatoday.com/money/media/2002-09-22-cable-probe_x.htm). Comcast disputes these charges, and states that it is aware of no evidence of such practices. Comcast Reply Comments at 19-20. See also AT&T Reply Comments at 9; KCCP Reply Comments at 1-2. In addition, RCN raised the same issue in the AT&T-Comcast merger review proceeding. See *AT&T-Comcast Merger Order* fn. 54 *supra* ¶¶ 117-119.

<sup>378</sup> BSPA Comments at 11-16. Comcast disputes these facts, stating that overbuilders have been able to gain access to terrestrially-delivered programming, and that there is no evidence of a trend toward migration to terrestrial delivery. Comcast Reply Comments at 21-22. See also NCTA Reply Comments at 7-14; KCCP Reply Comments at 2-3. BSPA notes that VOD/SVOD services will be a major pan of future revenue streams, and urges that the Commission’s program access rules should apply to VOD/SVOD services. BSPA Comments at 15-16.

<sup>379</sup> BSPA Comments at 16-17. BSPA urges the Commission to prohibit incumbent cable operators from entering into new long-term agreements, and to review existing long-term exclusive agreements. See also ¶¶ 120-122 *infra*.

<sup>380</sup> BSPA Comments at 17-19. Comcast states that charges like these have been answered in the record of the AT&T-Comcast merger, and that there is no credible evidence that overbuilders have been unable to hire labor or gain access to technologies. Comcast Reply Comments at 20. See also AT&T Reply Comments at 9.

<sup>381</sup> BSPA Comments at 20-22. According to BSPA, these difficulties result from intransigence, excessive fees, and slow action on the pan of pole owners and local governments.

problems as an entrant in these markets, including difficulties in entering MDUs, gaining access to poles, and gaining access to programming.<sup>382</sup>

### III. MARKET STRUCTURE AND CONDITIONS AFFECTING COMPETITION

#### A. *Horizontal* Issues in the Market for the Delivery of Video Programming

112. In this section, we review changes in the market for the distribution of video programming, including changes in the level of competition in that market between July 2001 and June 2002.<sup>383</sup> As we explained in earlier reports, the video programming market is comprised of a downstream market for the distribution of multichannel video programming to households, and an upstream market for the purchase of video programming by MVPDs. In our discussion of competition in the distribution of video programming to households, we also examine developments unique to MDUs, a significant sub-set of the market. We then review the market for the purchase of video programming by MVPDs, and examine the effects that changes in concentration among MVPDs at the regional and national levels have had on this market in the last year.

#### 1. Competitive Issues in the Market for the Distribution of Video Programming

113. The market for the delivery of video programming to households continues to be highly concentrated.<sup>384</sup> For most consumers the choices are over-the-air broadcast, cable, two DBS providers, and, in limited cases, an overbuilder or other delivery technology.<sup>385</sup> Several commenters point to lack of competition in the MVPD market and argue that true competition in the MVPD market can emerge only when substantial barriers to entry are removed.<sup>386</sup> According to commenters, these barriers to entry include: (a) predatory conduct including "predatory pricing"; (b) strategic behavior by an incumbent to raise its rival's costs by limiting the availability of certain popular programming as well as equipment; and (c) local and state level regulations, including delay in gaining access to local public rights-of-way as well as delay in getting cable franchises.<sup>387</sup>

114. During the past year, DBS has continued to make inroads in the MVPD market. DBS, the major wireless MVPD technology that is available to subscribers nationwide, saw its share of MVPD subscribers increase by two percentage points between June 2001 and June 2002. NCTA contends that competition between cable and DBS is robust and highly viable, and that in many states DBS penetration

<sup>382</sup> Utilicorp Comments at 6-10

<sup>381</sup> See, e.g., *2001 Report*, 17 FCC Rcd at 1298. See also *EchoStar-Hughes HDO fn. 21 supra*.

<sup>384</sup> See Appendix B, Table B-1. As of June 2002, approximately 77% of MVPD subscribers were served by cable MSOs.

<sup>385</sup> Some sources indicate, however, that some percentage of households cannot receive one or both DBS providers due to line of sight issues. For instance, Echostar reports that, "Estimates are that anywhere from 15% to 30% of the potential subscribers in the Northeast cannot receive EchoStar service due to line of sight issues." *Application of EchoStar Communications Corporation, General Motors Corporation, Hughes Electronics Corporation, Transferors, and EchoStar Communications Corporation, Transferee, For Authority to Transfer Control; Application of EchoStar Satellite Corporation and Hughes Electronics Corporation for Authority to Launch and Operate NEW ECHOSTAR 1 (USABBS-16)*, CS Docket No. 01-348, Amendment to Consolidated Application for Authority to Transfer Control (Nov. 27, 2002) at 13.

<sup>386</sup> BSPA Comments at 7-19; DirecTV Comments at 8-11; Echostar Comments at 4

<sup>387</sup> BSPA Comments at 9; DirecTV Comments at 8-9; Echostar Comments at 4; Utilicorp at 4-5; Hometown Comments at 1-3; OPASTCO Reply Comments at 3

exceeds 15%.<sup>388</sup> DBS, according to NCTA, has proven to be an enduring competitor to cable by providing an array of exclusive sports programming, advanced and interactive services, and by bundling video and non-video services.<sup>389</sup> Anecdotal evidence suggests that competition between cable and DBS is having an effect on cable prices.<sup>390</sup> The *2001 Price Survey Report*, using a regression equation, however, indicated that in areas where there is significant DBS penetration, the presence of DBS competition had no statistically significant effect on the demand for cable services or on cable rates.<sup>391</sup> In a recent study, GAO found that it appears that DBS is able to compete more effectively for subscribers with cable in areas where the DBS companies offer local channels than in areas where the DBS companies do not offer local channels, although this competitiveness had not led to lower cable prices in 2001.<sup>392</sup>

115. Relatively small percentages of consumers have a second wireline alternative, such as an overbuild cable system. Of the 33,246 cable community units nationwide, 671, or approximately two percent have been certified by the Commission as having effective competition as a result of consumers having a choice of more than one wireline MVPD. Between June 30, 2001, and June 30, 2002, the Commission granted eight petitions for effective competition, representing 75 communities, based on competitive entry from LECs or their affiliates and DBS providers. The differences between the effect of competition and general market responses based on technological advances, improved marketing, and new service opportunities are not always easy to distinguish. In cases where incumbent cable operators faced competition from a new wireline entrant, however, commenters contend that incumbents have responded to competition by reducing their monthly charge for cable programming services and equipment, by offering additional channels, or by offering Internet and other telecommunications services.<sup>393</sup>

116. Several wireless MVPD technologies, other than DBS, provide services that are much smaller in both scope and scale than services provided by an incumbent cable operator. For example, the service area covered by a SMATV system usually covers only a small portion of a cable system's franchise area. MMDS systems, on the other hand, often serve larger areas than SMATV service, but offer fewer channels and require line-of-sight for reception. Thus, these services offer consumers alternatives to incumbent cable services only in limited areas.

117. As of June 2002, RCN, which operates a large number of overbuild systems, was offering video service to approximately 506,700 basic subscribers.<sup>394</sup> Another wireline overbuilder, WideOpenWest, had 310,000 basic subscribers as of June 2002. BSPA contends that its members provide facilities-based broadband including video services to approximately one million subscribers in all major regions other than the Pacific Northwest.<sup>395</sup> AT&T contends that it faces competition from BSPs in over 20 markets with approximately 2.2 million subscribers. AT&T further contends that BSPs

<sup>388</sup> NCTA Comments at 13.

<sup>389</sup> NCTA Comments at 18-19.

<sup>390</sup> Peter Grant, *The Cable Guy Curs His Rates*, WALL STREET JOURNAL, Sept. 25, 2002, at D1.

<sup>391</sup> *2001 Price Survey Report*, 17 FCC Rcd 6301. Northpoint Technology contends that despite DBS's 18% share, it does not compete with cable in terms of price. See Northpoint Technology Comments at 2; see also DirecTV Comments at 1.

<sup>392</sup> *Issues in Providing Cable and Satellite Television*, GAO Report to the Subcommittee on Antitrust, Competition, Business and Consumer Rights, United States Senate, October 2002.

<sup>393</sup> BSPA Comments at 25; Everest and Utilicorp Comments at 4. The *2001 Price Survey Report* also supports this view, 17 FCC Rcd 6301.

<sup>394</sup> Kagan World Media, *Top Cable System as of June 2002*, Cable TV Investor, Sept. 30, 2002, at 9-10.

<sup>395</sup> BSPA Comments at 5.

will continue to be vigorous competitors because they have received higher rate of customer satisfaction than cable and that **BSPs** have moved closer to financial stability and are dependent less on venture

**118. Recent Developments in the MDU Market.** A significant segment of many local MVPD markets is multiple dwelling units ("MDUs"). MDUs are comprised of a wide variety of high-density residential complexes, including high and low-rise rental buildings, condominiums, and cooperatives. Historically, cable and SMATV operators were the primary providers of MVPD services to MDU residents. According to one estimate, 20% to 23% of a cable operator's income comes from MDU subscribers.<sup>397</sup> More recently, however, DBS providers have begun to supply programming to operators that serve MDUs and to MDU residents directly.<sup>398</sup>

**119. Competitive Issues in the MDU Market.** Commenters raise a number of issues that they contend adversely affect their ability to serve the MDU market. These include exclusive contracts, access to MDU inside wiring, and the Commission's over-the-air-reception devices ("OTARD") rules.<sup>399</sup>

**120. Exclusive and Perpetual Contracts.** Exclusive contracts are those that specify that video service in an MDU will be provided by a particular MVPD and no other. Perpetual contracts are those which grant an MVPD the right to provide service for indefinite or very long periods of time. Some commenters suggest that exclusive and perpetual contracts between incumbent MVPDs and MDU owners represent a barrier to entry in the MDU market.<sup>400</sup> According to commenters, such contracts often were entered into before the arrival of alternative MVPDs in the MDU market, and the continued existence of these contracts prevents the MDU owners and/or their tenants from having an opportunity to select among competing providers.<sup>401</sup>

**121.** BSPA contends that competitive broadband service providers cannot serve most MDUs because incumbent cable operators have established exclusive agreements with the owners of these MDUs.<sup>402</sup> BSPA further argues that some BSPs will not enter certain markets where MDUs comprise a significant portion of the franchise due to the exclusionary contracts in place.<sup>403</sup> DirecTV argues that MDU residents have limited choices among MVPD providers because exclusive contracts or exclusive "rights of entry" between incumbents and property owners either discourage new entrants or make it impossible for them to enter the market.<sup>404</sup> DirecTV argues that cable operators are able to thwart competition in the MDU market by resorting to exclusive service contracts or exclusive rights to entry that prohibit MDU property owners or residents from obtaining video programming services from an alternative service provider.<sup>405</sup> Comcast responds that most of its MDU contracts are exclusive marketing

<sup>396</sup> AT&T Comments at 9-10.

<sup>397</sup> Larry Kessler, *Good Night, Gorilla Good Morning, Guerilla*, Broadband Propensities, March 2001 at 12.

<sup>398</sup> DirecTV claims that approximately 20% of its subscribers live in places other than single family homes. See DirecTV Comments, 2001 *Reporr.* at 12. See also ¶ 75 *supra*.

<sup>399</sup> BSPA Comments at 16-17; DirecTV Comments at 19; Utilicorp Comments at 6.

<sup>400</sup> *Id.*

<sup>401</sup> See BSPA Comments at 10-11. See also ¶¶ 78, 110 *supra*.

<sup>402</sup> BSPA Comments at 16. In particular, BSPA cites a survey conducted by Carolina Broadband that found that at least 90% of all MDU residents living in Charlotte and Raleigh, for example, are prohibited from choosing a competitive wireline competitor due to exclusive agreements between incumbents and MDU owners.

<sup>403</sup> BSPA Comments at 17.

<sup>404</sup> DirecTV Comments at 19.

<sup>405</sup> *Id.*



agreements, not exclusive access agreements. and that overbuilders enter into the same kind of exclusive arrangements.<sup>406</sup> NCTA argues that the Commission may not abrogate existing contracts unless it has clear statutory mandate or authorization to do so; and any future restriction on exclusive contracts should apply to all MVPDs on a non-discriminatory basis.<sup>407</sup> Several parties in the Inside Wiring proceeding suggest that exclusive contracts may represent the only way, because of financial or other requirements, that competitive MVPDs may enter an MDU market and present an alternative to incumbent MVPDs in that market.<sup>408</sup>

122. BSPA and Utilicorp contend that incumbent cable operators also have agreements with “evergreen” provisions, such that they are automatically renewed every time the franchise is renewed.<sup>409</sup> Since the majority of franchise agreements are renewed automatically, agreements with such provisions are commonly referred to as perpetual contracts. IMCC contends that 30% of all MDU properties in the U.S. fall under perpetual contracts.<sup>410</sup> The Real Access Alliance, representing leading real estate trade organizations, conducted a survey of 4,795 property owners in an effort to gauge the frequency of perpetual contracts.<sup>411</sup> The Real Access Alliance found that only 3.8 to 4.8% of MDUs are subject to such contracts today and that none of them were executed within the past five years.

123. **OTARD Rules.**“” DirecTV asserts that the Commission’s OTARD rules should be expanded to cover common areas for MDU residents.”” DirecTV states that while the Commission’s OTARD rules have encouraged some MDU landlords and owners to use a single dish for reception to prevent “dish clutter,” the rule should be extended to common areas so that renters and owners who do not have exclusive use of areas suitable for satellite reception will also be able to receive DBS service.”

## 2. Competitive Issues in the Market for the Purchase of Video Programming

124. Buyers in the market for the purchase of video programming are MVPDs, including cable operators and other video programming providers. and the sellers are primarily non-broadcast programming networks.<sup>415</sup> This market tends to be regional or national since programmers seek to reach

<sup>406</sup> Comcast Reply Comments at 20.

<sup>407</sup> NCTA Reply Comments at 15; *See also* KCCP Reply Comments at 2.

<sup>408</sup> *See* Comments of the Community Associations Institute (December 23, 1997) and the Building and Managers Association International (December 23, 1997) filed in *Telecommunications Services, Inside Wiring, Customer Premises Equipment, Implementation of the Cable Television Consumer Protection and Competition Act of 1992: Cable Home Wiring* (“Inside Wiring proceeding”). 13 FCC Rcd 3659 (1997).

<sup>409</sup> BSPA Comments at 16; Utilicorp Comments at 6.

<sup>410</sup> Larry Kessler, *One Fish, Two Fish, Red Fish, Blue Fish*. Broadband Properties, April 2002 at 18.

<sup>411</sup> The Real Access Alliance submitted the results of its surveys, dated February 1, 2002, of large and small MDUs to the Commission in the Inside Wiring proceeding. The large MDU survey covered a total of 4,795 MDU properties, which represented a total of 1,207,184 units. Of those, only 241 properties, which represented 58,208 units or 4.8% of the total units surveyed were subject to perpetual contracts. The survey of small MDUs covered a total of 74 randomly selected properties. Of those, only two properties, or 3.8%, were subject to perpetual contracts.

<sup>412</sup> 47 C.F.R. § 1.4000.

<sup>413</sup> DirecTV Comments at 20.

<sup>414</sup> *Id.*

<sup>415</sup> *1998 Report*, 13 FCC Rcd at 24362. In this section, we refer to programming that is packaged as one or more 24-hour video programming network(s), rather than the individual shows and series that non-broadcast networks and broadcast networks purchase and package into 14-hour networks. Purchasing content and packaging it into networks represent two steps in the process of delivering programming to consumers which, when combined with a means of distribution, result in the programming choices consumers have. *See Implementation of Section 11 of the*

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a much broader audience than could be provided by a local franchise area. For example, some programming services are intended for a nationwide audience (*e.g.*, CNN, USA) while others seek a regional audience (*e.g.*, New England Sports Channel).

125. AT&T argues that the Commission should include purchasers of all video programming, and not just multichannel video programming, when considering the market for the purchase of video programming.<sup>416</sup> AT&T argues that broadcast stations and networks compete with MVPDs in the program purchase market as well as in the advertising and program distribution markets. The Commission is currently considering these issues in its rulemaking concerning cable horizontal and vertical limits.<sup>417</sup>

#### a. The Regional Programming Market

126. For the past several years, cable operators have engaged in a regional strategy called "clustering." Many of the largest MSOs have concentrated their operations by acquiring cable systems in regions where the MSO already has a significant presence, while giving up other holdings scattered across the country. This strategy is accomplished through purchases and sales of cable systems, or by system "swapping" among MSOs.

127. **Competitive Issues Related to Clustering.** AT&T contends that clustering of cable systems can create greater economies of scale and scope, and enable cable operators to offer a wider variety of broadband services at lower prices to customers. In addition, AT&T contends that clustering enables cable operators to: (a) spread costs over a number of systems and a larger subscriber base; (b) deliver a higher quality of signal to consumers; (c) offer more local and regional programming for consumers; (d) provide better customer service and fewer outages; (e) create more efficient interconnections that enhance educational and governmental uses; (f) develop more attractive joint consumer promotions and discounts with area retailers and others; and (g) increase advertising revenues, which can, in turn, be used to offset a portion of programming and system upgrade expenses.<sup>418</sup>

128. Several commenters assert harmful effects of clustering and regional concentration on program distribution with regard to vertically-integrated incumbent cable operators.<sup>419</sup> Specifically, these commenters contend that cable operators have "migrated" programming, and will to a greater extent in the future, migrate programming from satellite delivery to terrestrial (fiber optic) delivery because only satellite-delivered programming is subject to the program access rules.<sup>420</sup> These commenters contend that a vertically-integrated incumbent may be able to prevent competitors from gaining access to certain

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**Cable Television Consumer Protection and Competition Act of 1992, Implementation of Cable Act Reform Provisions of the Telecommunications Act of 1996, the Commission's Cable Horizontal and Vertical Ownership Limits and Attribution Rules, Review of the Commission's Regulations Governing Attribution of Broadcast and Cable/MDS Interests, Review of the Commission's Regulations and Policies Affecting Investment in the Broadcast Industry, Reexamination of the Commission's Cross-Interest Policy ("Cable Ownership Notice"),** 16 FCC Rcd at 17312 (2001). Video programming also is purchased from program producers and suppliers by non-broadcast networks as well as broadcast stations and networks, but we do not address that market here.

<sup>416</sup> AT&T Comments at 10-11

<sup>417</sup> See **Cable Ownership Notice**, 17 FCC Rcd at 17326-7.

<sup>418</sup> AT&T Comments at 14-17.

<sup>419</sup> BSPA Comments at 14-15; DirecTV Comments at 10-11; EchoStar Comments at 9-11; SBCA Comments at 17.

<sup>420</sup> *Id.*

programming because it is terrestrially delivered.'" NCTA replies that DBS, at least, is large enough to negotiate for carriage of virtually all satellite-delivered networks and that DBS has its own exclusive arrangements for programming.'" NCTA also states that requiring sharing of all cable-owned programming with competitors would remove incentives to invest in and to create such programming.<sup>423</sup>

129. **System Mergers and Acquisitions.** The most important merger of the past year was that of the largest MSO, AT&T, with the third largest MSO, Comcast.'" No other large cable mergers occurred or were proposed over the past year. Between July 2001 and June 2002, a total of 28 transactions were announced having an aggregate value of approximately \$73.3 billion and involving 14.3 million subscribers.'" Removing the AT&T-Comcast deal, the aggregate value of the remaining deals was only \$1.2 billion, and involved only 500,000 subscribers.<sup>426</sup> In addition, the price per subscriber in these deals dropped dramatically.<sup>427</sup> At the end of 2001, there were 107 clusters with approximately 52 million subscribers compared to 108 clusters and approximately 54 million subscribers at the end of 2000. In the largest cluster size category (over 500,000 subscribers), the number of clusters decreased between 2000 and 2001, from 34 to 32, and the number of subscribers in these clusters decreased also.<sup>428</sup>

130. **System Trades.** Very little system trading, or swapping, occurred in the last year. Between the July 2001 and the end of 2001, none occurred.'" In 2002, three swaps have occurred, between Mediacom and U.S. Cable Corp., between Insight and AT&T,<sup>430</sup> and between CableOne and Time Warner.'"

#### b. The National Programming Market

131. **Concentration Among Buyers of National Video Programming.** Cable operators still are the primary purchasers of multichannel video programming targeted to a national audience. Cable

<sup>421</sup> DirecTV, for example, notes that it cannot carry Comcast SportsNet in Philadelphia because Comcast has denied access to it. DirecTV Comments at 15. Utilicom states that it cannot carry Metro Spons. a Kansas City-area sports network, because its owner, Kansas City Cable Partners, refuses to allow Utilicom access. Utilicom Comments at 9. AT&T replies that only three out of 24 vertically-integrated regional spons networks have been distributed terrestrially, so there is no basis for extending program access rules to terrestrially-delivered programming. AT&T Reply Comments at 8-9. See also Cablevision Reply Comments at 6-7; Comcast Reply Comments at 22.

<sup>422</sup> For example, NCTA cites DirecTV's NFL "Sunday Ticket" football package. NCTA Comments at 16. AT&T states that there is no evidence that cable operators have used clusters to act anti-competitively. AT&T Comments at 18-19.

<sup>423</sup> NCTA Reply Comments at 7

<sup>424</sup> See *AT&T-Comcast Merger Order* fn. 54 *supra*

<sup>425</sup> Kagan World Media, *Cable System Soles Summary*, Cable TV Investor, August 29, 2001, at 8; January 25, 2002, at 11; and August 29, 2002, at 8.

<sup>426</sup> When announced, the AT&T-Comcast deal involved 13.8 million subscribers at a value of more than \$71 billion.

<sup>427</sup> *Id.*

<sup>428</sup> See Appendix B, Table B-2

<sup>429</sup> Kagan World Media, *Cable System Exchanges 2001*, Broadband Cable Financial Databook 2002, July 2002, at 181

<sup>430</sup> Kagan World Media, *Announced/Proposed Cable System Soles*, Cable TV Investor, July 18, 2002, at 7; Oct. 31, 2002 at 9.

<sup>431</sup> *Mass Media*, Comm. Daily, Nov. 15, 2002, at 13.

operators served approximately 76.5% of MVPD subscribers.” At the same time, non-incumbent MVPDs continued to increase their share of the MVPD market, which translates into increased purchasing in the programming market. For example, DirecTV’s share of the MVPD market increased from 11.38% in 2001 to 11.99% in 2002. Similarly, EchoStar’s share increased from 6.87% in 2001 to 8.3% in 2002.<sup>433</sup>

132. Continuing a recent trend, the share of subscribers of the top four MVPDs has declined slightly over the past year.<sup>434</sup> In 2001, the four MVPDs with the largest subscribership served 51.68% of all MVPD subscribers.<sup>435</sup> In 2002, the top four MVPDs served 50.48% of all MVPD subscribers nationwide.<sup>436</sup> However, the share of subscribers served by the top ten MVPDs increased slightly from 84.29% in 2001 to 84.44% in 2002.

133. To compare and assess the concentration in the market for the purchase of programming over a period of time, we employ the Herfindahl-Hirschman Index (“HHI”).<sup>437</sup> We use the reported MVPD subscriber shares to calculate HHI figures.<sup>438</sup> The HHI for the national market for purchase of programming is 884 – considered “unconcentrated” under the Merger Guidelines.<sup>439</sup> Since the larger

<sup>432</sup> See Appendix B, Table B-I. This year, NCTA submitted a statement by Dr. Debra J. Aron regarding cable market share and its relationship with market power. NCTA and Dr. Aron state that to focus on market shares is simply wrong and that what determines market power is the extent to which competitive alternatives are available or poised to be available, to which customers could turn if the firm attempted to raise price. NCTA maintains that it is the availability of competitive alternatives, not a competitor’s current market share, which is relevant to assessing competition. NCTA Comments at 7. See also AT&T Reply Comments at 5-7; Comcast Reply Comments at 7; NCTA Reply Comments at 6-7. Dr. Aron argues that high rates of growth in prices do not in general create an economic inference of market power and that market share is not determinative of market power, and is not even the primary determinant. NCTA Comments, Statement of Dr. Aron at ¶¶ 7-8 and ¶¶ 25-26. In reply, EchoStar argues that Dr. Aron’s analysis is based on a false premise. It contends that DBS has not constrained cable prices and that cable price increases are not simple cost pass-throughs, consistent with economic theory that suggests that the extent to which cost increases are passed on is directly related to the degree of market power present. See EchoStar Reply Comments at 2-4.

<sup>433</sup> DirecTV is the third largest MVPD with 10,775,000 million subscribers; EchoStar is the fifth largest MVPD with 7,465,000 million subscribers. See <http://www.sbca.com/mediaguide/factsfigures.htm> (visited Oct. 16, 2002). See also ¶¶ 58-59 *supra*.

<sup>434</sup> The top four MVPD purchasers of video programming for distribution to the households or the MDU market are AT&T (with a share of 14.75% of all MVPD subscribers), Time Warner (with a share of 14.29%), DirecTV (with a share of 11.99%), and Comcast (with a share of 9.46%). These percentages are derived from publicly-available data and are not the result of application of the Commission’s attribution rules.

<sup>435</sup> 2001 Report, 17 FCC Rcd at 1341, Appendix C, Table C-3.

<sup>436</sup> See *id.* at 1341-1543, Appendix B, Tables C-3 and C-4.

<sup>437</sup> 1998 Report, 13 FCC Rcd at 24363 n.562. The HHI is a measure of concentration that is calculated by summing the squared market shares of the participants in the market. It is a measure of concentration that takes account of the distribution of the size of firms in the market. The HHI varies with the number of firms in the market and degree of inequality among firm size. Generally, the HHI increases when there are fewer and unequal sized firms in the market. HHI is usually employed to examine concentration in markets in which products are sold directly to consumers, not intermediate markets like the market for cable programming networks, but a comparison of HHIs from previous years shows a general trend in ownership concentration.

<sup>438</sup> The HHI calculation is based on the MVPD shares of cable companies serving over 91% of all subscribers and the two largest DBS operators. The addition of the shares of other cable operators and smaller MVPDs would add little to the total HHI. We do not include broadcast television or home video in the MVPD HHI because comparable penetration figures are not available.

<sup>439</sup> The United States Department of Justice and Federal Trade Commission consider markets with HHI below 1000 as “unconcentrated,” markets with an HHI between 1000 and 1800 as “moderately concentrated,” and markets with

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firms in the calculation are more equal in size. the HHI for 2002 is 21 points lower than the HHI of 905 reported last year.

## B. Vertical Integration and Other Programming Issues

### 1. Status of Vertical Integration

134. Vertical integration occurs where a video programming distributor has an ownership interest in a video programming supplier or vice versa. These vertical relationships may have beneficial effects,<sup>440</sup> or they may deter competitive entry in the video marketplace and/or limit the diversity of programming.<sup>441</sup> Since our last *Report*, the total number of national programming networks has increased and cable operators continue to consolidate and develop new ownership interests. The proportion of vertically-integrated networks, however, has decreased since last year. In 2002, there were 308 satellite-delivered national programming networks, an increase of 21 networks since 2001.<sup>442</sup> Of the 308 networks, 92 networks, representing approximately 30%, were vertically integrated with at least one cable MSO.<sup>443</sup> Last year, we reported the proportion of vertically-integrated networks as 35%.<sup>444</sup>

135. Four of the top six cable MSOs hold ownership interests in satellite-delivered national programming networks.<sup>445</sup> One or more of these companies has an interest in 79 of the 92 vertically integrated national satellite-delivered programming networks.<sup>446</sup> These four companies are AOL Time

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HHI above 1800 as "highly concentrated." See 1998 *Report*, 13 FCC Rcd at 24363. None of the calculations above include the AT&T-Comcast Merger, which was completed after June 30, 2002, which is the date we use.

<sup>440</sup> Beneficial effects can include efficiencies in the production, distribution, and marketing of video programming, and providing incentives to expand channel capacity and create new programming by lowering the risks associated with program production ventures. See, e.g., H.R. Rep. No. 862, 102nd Cong., 2d Sess. 56 at 41-43 (1992).

<sup>441</sup> See 1995 *Report*, 11 FCC Rcd at 2135; *Implementation of Section 11(c) of the Cable Television Consumer Protection and Competition Act of 1992 Vertical Ownership Limits*, MM Docket 92-264, 10 FCC Rcd 7364, 7365 (1995).

<sup>442</sup> In our last report, we counted 294 satellite delivered national programming networks. We overstated that number by seven networks, double counting between the Starz! and Encore channels. See 2001 *Report*, 17 FCC Rcd at 1345, 1346.

<sup>443</sup> We count each unique programming service of a multiplexed package separately. We do not, however, count services that are not unique, as in a multiplexed programming service that is merely time shifted. See 1998 *Report*, 13 FCC Rcd at 24376. See also 2000 *Report*, 16 FCC Rcd at 6079.

<sup>444</sup> If we had not overstated our count of satellite-delivered national programming networks in our last report, 34% of the networks would have been vertically integrated.

<sup>445</sup> We derive our information concerning vertically-integrated networks from various sources, such as NCTA listings in its *Cable Developments* publication, comments filed in this proceeding, various publications, and SEC filings. We recognize that our calculations may not be perfectly accurate because the ownership issue is so complex. For example, our tables do not reflect that Vulcan Programming, Inc., an entity controlled by Mr. Paul Allen, owns approximately 31% of Oxygen Network. We also note, as an example, that Liberty holds an attributable interest in News Corporation, which is the owner of cable networks operated by the Fox Cable Network Group and Fox News Channel. In addition, we note that Charter Holding Company will receive unregistered shares of Oxygen Media common stock on, or prior to, February 2, 2005. Mr. William Savoy, a director of Charter and Charter Holding Company sits on Oxygen Network's board of directors.

<sup>446</sup> The top six MSOs are AOL Time Warner, Comcast Cable Communications, Charter Communications, Cox Communications, Adelphia Communications, and Cablevision Systems. See NCTA, *Industry Overview*, Cable Developments 2002, at 9. We have combined the programming interests of AT&T Broadband and Comcast because AT&T Broadband combined with Comcast Corporation on Nov. 18, 2002. See Ted Hearn and Mike Farrell, *Cleared for Takeoff, Comcast Seals Cable's Biggest Merger*, Multichannel News, Nov. 18 at 1.

Warner, which has interests in 39, or 13% of all national programming networks; Cox, which has an ownership interest in 25, or 8% of all national programming networks; Comcast which has ownership interests in nine programming networks, which account for 3% of all national programming networks, and Cablevision, through its programming subsidiary, Rainbow Media, which owns five national programming networks, or 2% of all national programming networks. Liberty Media is the only other cable operator that owns national programming networks.<sup>447</sup> It has interests in 41 national networks, or 13% of all national programming networks.<sup>448</sup>

136. Vertical integration is not only associated with the largest cable system operators, but also the programming networks with the largest number of subscribers. Currently, eight of the top 20 video programming networks (ranked by subscribership) are vertically integrated with a cable MSO. This figure represents a slight increase from 2001 when seven of the top 20 networks were vertically integrated.<sup>449</sup> Additionally, it appears that a significant amount of video programming is controlled by 14 companies, including cable MSOs, broadcasters, and other media entities.<sup>450</sup> Almost all (i.e., 18) of the top 20 programming networks in terms of subscribership are owned by one or more of these 14 companies, with nine of these networks vertically integrated with cable MSOs.<sup>451</sup>

137. This year, we found 60 programming services that have been planned but are not yet operational, a 17% increase from the 2001 Report's count of 51 planned services.<sup>452</sup> The planned services count includes some overlap from previous years because it can often take several years from the announcement of a new programming network to its launch and initiation of service.

## 2. Other Programming Issues

138. As in previous years, this year's Notice requested comment on a number of programming issues apart from vertical integration and the status of existing and planned programming services.<sup>453</sup> We sought comment about the effectiveness of our program access, program carriage, and channel occupancy rules that govern the relationships between cable operators and programming providers. We also requested information about: local and regional channels, including sports and news services; public,

<sup>447</sup> We include Liberty Media's programming networks in our determination of the share of national programming networks that are vertically integrated because it is covered by the provisions of the 1992 Act and the Commission's rules relating to program access, channel occupancy, and program carriage rules. See 47 U.S.C. § 548, 47 C.F.R. §§ 76.1000-76.1003. These rules apply to any party that owns a cable system and a satellite-delivered national programming network. Liberty Media remains a cable operator through its ownership of Cablevision of Puerto Rico and, as such, it is appropriate to include its networks in calculating the share of vertically-integrated national programming networks.

<sup>448</sup> If we did not count Liberty Media as being vertically integrated, the ratio of vertically integrated channels would decrease from 34% in 2001 to 20.6% in 2002. See Appendix C, Table C-5.

<sup>449</sup> Appendix C, Table C-6. See also 2001 Report, 17 FCC Rcd at 1310.

<sup>450</sup> The 14 companies are: AOL Time Warner, Cablevision, Comcast, Cox, Disney, E. W. Scripps Co., General Electric, Hearst, Liberty Media, MGM, Newhouse, News Corp., Viacom, and Vivendi. See Kagan World Media, *Major Owners of Cable Networks: Sept. 2001*, Cable Program Investor, Sept. 11, 2001, at 4.

<sup>451</sup> C-SPAN, C-SPAN2, WGN, and the Weather Channel are the four unaffiliated programming networks among the top 50 programming networks. Cable affiliates provide 95% of the funding for, but have no ownership or program control interests in C-SPAN and C-SPAN2. DBS licensees provide the other 5% of funding, and also have no ownership or program control interests. None of the 14 companies listed in footnote 450 *supra* have any ownership interest in WGN or the Weather Channel. See Kagan World Media, *Network Census: July 30*, Cable Program Investor, Sept. 11, 2001, at 10.

<sup>452</sup> See Appendix C, Table C-4. See also 2001 Report, 17 FCC Rcd at 1311.

<sup>453</sup> See Notice, 17 FCC Rcd at 11582-11584.

educational and governmental ("PEG") access channels; leased access programming; compliance with the DBS public interest programming obligations; packaging of programming services; programming costs; closed captioning and video description; and electronic programming guides ("EPGs").

139. ***Regulatory Issues Relating to Program Access and Carriage Rules.*** The Commission's rules concerning competitive access to cable programming seek to promote competition and diversity in the multichannel video programming market by preventing vertically-integrated programming suppliers from favoring affiliated video distributors over unaffiliated MVPDs in the sale of satellite-delivered programming.<sup>454</sup> The program access rules apply to cable operators and to programming vendors that are affiliated with cable operators and deliver video programming via satellite to an MVPD. The rules prohibit any cable operator that has an attributable interest in a satellite cable programming vendor from improperly influencing the decisions of the vendor with respect to the sale or delivery, including prices, terms, and conditions of sale or delivery, of satellite-delivered programming to any competing MVPD. The rules also prohibit vertically-integrated satellite programming distributors from discriminating in the prices or terms and conditions of sale of satellite-delivered programming to cable operators and other MVPDs. In addition, cable operators generally are prohibited from entering into exclusive distribution arrangements with vertically integrated-programming vendors. The Commission has concluded that the statutory access requirements apply only to satellite-delivered and not to terrestrially-delivered programming.<sup>455</sup>

140. Under the Communications Act, the prohibition on exclusive contracts enacted as part of the program access provision in the 1992 Act was set to sunset on October 5, 2002, unless the Commission determined the rules were still necessary. On June 13, 2002, the Commission adopted a ***Report and Order*** extending the prohibition until October 5, 2007. In the ***Report and Order***, the Commission decided that this prohibition continues to be necessary to preserve and protect competition and diversity in the distribution of video programming.<sup>456</sup> In the same proceeding, the Commission concluded that the language of section 628(c) expressly applies to satellite programming, and that terrestrially-delivered programming is not covered.<sup>457</sup>

141. Cable's competitors, including BSPA, DirecTV, and EchoStar, suggest that the program access rules should be broadened to include terrestrially-delivered programming.<sup>458</sup> Several commenters maintain that, despite the presence of the program access rules, lack of access to programming, especially sports programming, remains a significant barrier to entry and an impediment to the successful development of a competitive MVPD business.<sup>459</sup> EchoStar maintains that terrestrially-delivered programming is bound to increase while demand for local and regional programming, which cable operators tend to withhold from DBS, will also increase.<sup>460</sup>

<sup>454</sup> 47 U.S.C. § 548.

<sup>455</sup> *Implementation of the Cable Television Consumer Protection and Competition Act of 1992, Petition for Rulemaking of Ameritech New Media, Inc. Regarding Development of Competition and Diversity in Video Programming Distribution and Carriage*, 13 FCC Rcd 15822, 15856-7 (1998).

<sup>456</sup> *Implementation of the Cable Television Consumer Protection and Competition Act of 1992, Development of Competition and Diversity in Video Programming Distribution: Section 628(c)(5) of the Communications Act*, 17 FCC Rcd 12124 (2002).

<sup>457</sup> *Id.* at 12158.

<sup>458</sup> BSPA Comments at 13; DirecTV Comments at 10; EchoStar Comments at 11.

<sup>459</sup> Utilicorp Comments at 9; SBCA Comments at 17-18.

<sup>460</sup> EchoStar Comments at 10-11.

142. DirecTV expresses concern about the Commission's failure to apply the program access rules to programming that was formerly delivered by satellite and subsequently was migrated to terrestrial delivery. It also maintains that technological advances, which have lessened the costs of developing terrestrially-delivered programming, combined with clustering, have made terrestrial distribution of programming a much more viable method for delivery of both national and regional programming.<sup>461</sup> It urges the Commission to carefully monitor the effects of terrestrial distribution of vertically-integrated programming by cable operators.<sup>462</sup>

143. Cable operators are opposed to the extension of the program access rules to include terrestrially-delivered programming. Comcast states that consumers in its service areas have at least two and sometimes three or more additional choices of MVPD. It maintains that competition is so robust that cable companies must develop and deploy new technologies to support new services or lose their subscribers to competitors.<sup>463</sup> Comcast also disputes BSPA's claims that incumbent cable operators have both the opportunity and the incentive to refuse their terrestrially-delivered programs to competitors. Comcast states that it has always made Comcast Sports Net available to overbuilders, and points out that RCN has carried Comcast SportsNet since it was launched.<sup>464</sup> AT&T takes issue with DirecTV's allegation that incumbent cable operators have begun to use terrestrial delivery in order to insulate themselves from the program access requirements.<sup>465</sup> NCTA denies EchoStar's assertion that there is a "terrestrial loophole" in the program access stature. It states that Congress never intended to require cable operators to share all programming with competitors and deliberately limited the access requirement to satellite-delivered programming.<sup>466</sup>

144. Pursuant to section 613(f) of the Communications Act,<sup>467</sup> the Commission also adopted channel occupancy rules that restricted the number of channels on a cable system that may be occupied by programmers affiliated with the owner of the system.<sup>468</sup> On March 3, 2001, the United States Court of Appeals for the D.C. Circuit reversed and remanded Commission's channel occupancy limits.<sup>469</sup> The Commission has sought and received comment on, among other things, how changes in the MVPD market and in the level of vertical integration for cable MVPDs may have affected MSOs' ability to favor affiliated over unaffiliated programming.<sup>470</sup>

145. **Sports Programming.** Regional sports programming continues to be an important segment of programming for all MVPDs. According to many commenters, local and regional programming holds high value for subscribers.<sup>471</sup> Of the 86 regional cable channels counted in this year's report, 31, or 36%, are sports channels.<sup>472</sup> The most widely distributed sports programming network, ESPN, which is owned by Disney, reaches almost 86 million television households through a variety of

<sup>461</sup> DirecTV Comments at 10.

<sup>462</sup> *Id.* at 11.

<sup>463</sup> Comcast Comments at 9.

<sup>464</sup> Comcast Reply Comments at 22.

<sup>465</sup> AT&T Reply Comments at 8.

<sup>466</sup> NCTA Reply Comments at 7.

<sup>467</sup> Section 613(f) was added to the Communications Act as part of the 1992 Cable Act. 47 U.S.C. § 533(f).

<sup>468</sup> 41 C.F.R. § 76.504. See 1994 Report, 9 FCC Rcd at 7521.

<sup>469</sup> *Time Warner Entertainment Co. v. FCC*, 240 F.3d 1126 (D.C. Cir. 2001).

<sup>470</sup> See *Cable Ownership Notice*, fn. 415 *supra*.

<sup>471</sup> BSPA Comments at 14; EchoStar Comments at 10-11; Utilicorp Comments at 9-10; Hometown Comments at 1.

<sup>472</sup> See Appendix C, Table C-3.



MVPD technologies. While ESPN dominates national sports programming, regional sports distribution is dominated by Fox Sports Net, which owns 60% (18 of 30) of all regional sports networks. Fox Sports Net, jointly owned by News Corp. and Cablevision, reaches 50 million television households.'"

146. EchoStar asserts that regional sports programming is the type of programming that cable operators tend to withhold from DBS operators.<sup>474</sup> Commenters note that vertically integrated entities may have an incentive to shift regional sports networks from satellite to terrestrial distribution and thereby evade the program access rules.<sup>475</sup> In addition, BSPA alleges that when a regional sports network is not vertically integrated, a video programming distributor may enter into an exclusive contract with the program provider, which deprives rivals of the programming.<sup>476</sup>

147. DirecTV lists 24 regional sports networks (including 18 Fox sports networks) that are carried on its system.<sup>477</sup> DirecTV carries regional sports networks in every regional sports market except Philadelphia, where it was refused access to Comcast's SportsNet.<sup>478</sup> Cablevision notes that DBS providers promote the advantages of their own exclusive sports programming and report to analysts that it is because of this advantage that cable's market share is declining.'"

148. **News Programming.** Local news channels have been on cable since at least 1986, when Cablevision launched News 12 Long Island. This year, of the 86 regional programming networks counted, 37% (32 networks) are regional news networks. Unlike sports programming, regional and local news networks have a more diverse ownership. Some regional news networks are vertically integrated with cable MSOs, but many are not.<sup>480</sup>

149. Most regional news networks cover a single city or other limited geographic market, or subsections of that market. There are at least seven local news networks in separate sections of the New York City area.' A handful of regional news networks, however, have elected to broaden their coverage. Statewide news channels are operating in Florida, Massachusetts, Texas, and Ohio. New England Cable News ("NECN") is the most widely distributed regional news network. NECN reaches more than 2.7 million households, approximately 69% of cable homes in the six-state region it serves.

<sup>473</sup> NCTA, *Regional Cable Networks*, Cable Developments 2002, at 171-194.

<sup>474</sup> EchoStar Comments at 10-11.

<sup>475</sup> DirecTV Comments at 10; EchoStar Comments at 10-11; SBCA Comments at 17; BSPA Comments at 15.

<sup>476</sup> BSPA Comments at 15.

<sup>477</sup> DirecTV Comments at 14.

<sup>478</sup> *Id.* at 15. See also *Application for Review of Orders of the Cable Services Bureau Denying Program Access Complaints*, 15 FCC Rcd at 22802 (CSB 2000). This Order consolidates several proceedings involving Comcast, DirecTV, and EchoStar. In separate proceedings, DirecTV and EchoStar filed program access complaints alleging that Comcast violated sections 628(b) and (c) of the Communications Act and the Commission's regulations by engaging in discrimination and unfair practices in the distribution of satellite cable programming. The Cable Services Bureau denied the complaints. Subsequently, DirecTV and EchoStar each requested Commission review; the Commission consolidated the proceedings and denied the applications for review. EchoStar appealed the Commission's decision and in *EchoStar Communications Corporation v Federal Communications Commission and the United States of America*, No. 01-1032, 2002 (D.C. Cir. Jun. 11, 2002) the court upheld the Commission's decision.

<sup>479</sup> Cablevision Comments at 7.

<sup>480</sup> Cablevision, the seventh largest MSO, owns news networks, including MSG Metro Traffic and Weather in New York and the News 12 group of regional news services in Connecticut, New Jersey, and Westchester County and Long Island, New York. See also Appendix C, Table C-3.

<sup>481</sup> Appendix C, Table C-3.

150. **Other Programming.** In the *Norice*, we sought information regarding public, educational and government ("PEG") channels, leased access programming, and programming provided by DBS operators in compliance with the public interest programming obligations.<sup>482</sup> Local franchising authorities may request, as part of the Franchising process, that operators devote a certain amount of channel capacity and equipment to PEG programming.<sup>483</sup> Approximately 15% of all cable systems carry PEG programming.<sup>484</sup> Larger cable systems tend to have PEG channels so that the percentage of subscribers that receive PEG channels is much higher than the percentage of systems providing PEG channels. Cable operators do not have ownership interests in PEG access programming, although some franchise agreements require that they provide services, production facilities, and equipment for the production of local programming. PEG programming is not, therefore, considered vertically integrated. Comcast reports that all of its systems carry PEG and/or leased access programming. Comcast states that about 2.7% of its channel capacity is devoted to local and federal requirements, not counting must-carry. If it includes digital channels, about 1.1% of total channels is devoted to local and federal requirements.<sup>485</sup>

151. DBS operators are required to reserve four percent of their channel capacity for "noncommercial programming of an educational or informational nature."<sup>486</sup> DirecTV states that it currently carries 11 channels pursuant to this requirement as well as additional educational channels that it does not include as part of its compliance with the rules.<sup>487</sup> EchoStar states that it currently carries 21 channels pursuant to this requirement, as well as additional educational channels that it does not include as part of its compliance with the rules.<sup>488</sup> DBS providers are charging some noncommercial programmers for carriage on their systems to the extent allowed by the Commission's rules.<sup>489</sup>

152. **Packaging of Cable Programming Services.** In the *Norice*, we sought information on whether cable operators are changing the way they package programming. We sought comment on the extent to which cable operators are restructuring their programming tiers to offer lifeline tiers and how many customers subscribe only to the lifeline tier. We asked if operators are shifting services to create uniform program offerings across regions or clusters. We also asked if cable operators are restructuring their programming tiers as a result of actual or potential competition and if such restructuring is intended to differentiate cable service from other MVPD services.<sup>490</sup>

<sup>482</sup> *Notice*, 17 FCC Rcd at 11583

<sup>483</sup> 47 U.S.C. § 531. Local franchise authorities are allowed to establish procedures under which the cable operator may utilize unused PEG channel capacity for other services. 47 U.S.C. § 531(d)(1).

<sup>484</sup> <http://www.alliancecm.org/about/info.htm>. PEG channels are intended to provide community-specific information, such as bulletin boards for local activities, local civic meetings, and local governmental activities. In addition to PEG channels, some cable operators are also providing local and regional sports, weather, and news programming.

<sup>485</sup> Comcast Reply Comments at 7 n.22

<sup>486</sup> See *Implementation of Section 25 of the Cable Television and Consumer Protection Act of 1992, Direct Broadcast Satellite Public Interest Obligations*, 13 FCC Rcd 23254 (1998).

<sup>487</sup> This programming includes C-SPAN, Trinity Broadcasting Network, PBS Lifelong Learning, WorldLink TV, Eternal Word Television Network, Clara+Vision, Inspirational Life, NASA-TV, RFD-TV, The Word, and BYU-TV. It does not count C-SPAN2 or the PBS KIDS channel towards this obligation. DirecTV Comments at 15.

<sup>488</sup> Letter from David R. Goodfriend, Director, Legal and Business Affairs, EchoStar Satellite Corporation, to W. Kenneth Ferree, Chief, Media Bureau, FCC (Nov. 19, 2002).

<sup>489</sup> Under our rules, a DBS provider may charge no more than 50% of the direct costs involved in making capacity available to carry a qualified noncommercial programmer counted in satisfaction of the set-aside rule. See 47 C.F.R. § 25.701(c)(5).

<sup>490</sup> *Norice*, 17 FCC Rcd at 11582

153. Comcast states that over 95% of its cable systems have been upgraded to two-way, digital communications. It says that its digital services have been exceptionally successful. Comcast also relates that it can now offer its customers an array of video content designed to meet virtually every identified viewing interest.<sup>491</sup> It maintains that VOD functionality will further stimulate the demand for digital services, and provides subscribers with even more control over their viewing choices.<sup>492</sup>

154. According to NCTA, digital cable has moved beyond the introductory phase and is now a permanent fixture in many households. The expanded capacity made possible by digital compression technology has enabled programmers to launch more than 90 digital channels, offering a wide range of genres, including sports, music, movies, children's, family, and foreign language programming.<sup>493</sup> Digital services may be packaged as stand-alone packages of digital video channels, or in combination with pay-per-view and VOD. NCTA states that most cable systems offer a choice of two to four analog and digital tiers of video programming consisting of broadcast and satellite-delivered network. They also offer multiple packages of premium service and four or more payper-view networks.<sup>494</sup> The transition from pure analog systems to combination analog-digital systems has resulted in some repackaging and re-tiering of services to provide more options for customers, e.g., AT&T Broadband modified its digital tiers by reconfiguring its digital packages to add more non-premium programming for subscribers who do not want digital services.<sup>495</sup>

155. The 1992 Cable Act generally prohibits cable operators from requiring subscribers to purchase a particular service tier, other than the basic service tier, in order to obtain access to video programming offered on a per-channel or per-program basis.<sup>496</sup> Cable systems that lack addressable set top boxes, or are restricted by other technological limitations, were afforded a ten-year grace period to come into compliance with the "tier buy-through requirement."<sup>497</sup> As of October 5, 2002, cable operators are no longer able to require subscribers to purchase cable programming service tiers in order to access premium or pay-per-view channels because of lack of equipment or technological limitations. In the absence of effective competition or a waiver, all cable operators are now subject to this "tier buy-through" prohibition.

156. **Programming Costs.** The Commission's most recent report on cable industry prices ("**2001 Price Survey Report**") asked cable operators to describe factors that led to changes in their rates. Competitive and noncompetitive cable operators attributed 50.7% and 46.1%, respectively, of their rate increases to increases in programming costs.<sup>498</sup> NCTA states that cable network programming

<sup>491</sup> Comcast Comments at 3-4.

<sup>492</sup> *Id.* at 5.

<sup>493</sup> NCTA comments at 29

<sup>494</sup> *Id.* at 30.

<sup>495</sup> *Id.* at 31.

<sup>496</sup> Some "per channel" services are offered on a "multiplexed basis. That is, the subscriber receives essentially the same programming repeated on several channels on a different time schedule. For rate regulation purposes, Congress has indicated that such multiplexed services are to be treated as if a single channel service were involved. H.R. Rep. No. 628, 102d. Cong., 2d Sess. 80 (1992) ("The Committee intends for these 'multiplexed' premium services to be exempt from rate regulation to the same extent as traditional single channel premium services when they are offered as a separate tier or as a stand-alone purchase option.") The Commission has indicated that the same treatment would be appropriate for purposes of the tier buy-through prohibition. See *Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992*, 8 FCC Rcd 2274, n 9 (1993).

<sup>497</sup> *Reminder of Tier Buy-Through Requirements for Cable Operators*, 16 FCC Rcd 17728 (MB 2001)

<sup>498</sup> Inflation, channel additions, and system upgrades, were also said to account for a large portion of rate increases. See *2001 Price Survey Report*, 17 FCC Rcd at 6311

expenditures have increased. It also indicates that the cable industry is purchasing higher quality programming. NCTA also notes that there has been a phenomenal growth in programming networks.<sup>500</sup> It is unclear from NCTA's comments whether *the* increased expenditures are the result of higher quality programming, increased programming purchases, or an increase in the price of individual programming networks.<sup>500</sup>

**157. *Closed Captioning and Video Description.*** In the *Notice*, we sought information regarding video programming providers' experiences offering closed captioning and video description.<sup>501</sup> In August of 2000, the Commission adopted rules requiring certain larger broadcasters and video programming distributors to provide "video descriptions" for some of their programming. Video descriptions are descriptions of key visual elements in a television program, inserted into the natural pauses in the program's audio, distributed in the program's second audio channel. These descriptions are intended to make television programming more accessible to people who are blind or visually impaired.<sup>502</sup> ABC, CBS, Fox, NBC, PBS, as well as the top five cable networks, Lifetime, Nickelodeon, TBS, TNT, and USA network, and Turner Classic Movies, among others, have been providing described programming either on their own or pursuant to these rules. Described programs include, for example, CSI: Crime Scene Investigation on CBS, Boston Public on Fox, Law & Order on TNT, Lifetime movies, television premieres of theatrical films and specials on ABC and USA Network, and Rugrats and Blues Clues on Nickelodeon.<sup>503</sup> Video descriptions are also made available on DVD versions of some feature films. On November 8, 2002, the U.S. Court of Appeals for the D.C. Circuit vacated the Commission's video description rules finding that they exceeded the Commission's authority.<sup>504</sup>

**158.** Closed captioning requirements also exist and are specifically provided for in the Communications Act.<sup>505</sup> Among the parties commenting in this proceeding, DirecTV states that it provides closed captioning on every channel that notifies it that it carries closed captioning.<sup>506</sup> DirecTV states that it has 46 local channels for which it has added the Second Audio Program channel to carry video description. Comcast reports that it is in full compliance with the closed captioning and video description rules.<sup>507</sup> It notes that its programming agreements require programmers to meet or exceed the Commission's requirements and that each programmer must provide it with quarterly certifications demonstrating that it is complying with the rules. During 2002, Discovery Communications discovered that it had failed to *close* caption the number of hours of programming it was required to provide pursuant to contracts with its programming distributors on four of its cable networks. This was, in part, a consequence of the rescheduling of already captioned programs. Discovery took steps to both make up

<sup>499</sup> NCTA Comments at 37.

<sup>500</sup> According to Kagan World Media, programming expenses have increased from \$7.2 billion in 2001 to \$7.9 billion in 2002. See *Economics of Basic Cable Networks 2002* at 433.

<sup>501</sup> *Notice*, 17 FCC Rcd at 11584.

<sup>502</sup> See *Video Description of Video Programming*, 15 FCC Rcd 15230 (2000).

<sup>503</sup> See e.g. [www.washear.org/dailylogs.htm](http://www.washear.org/dailylogs.htm).

<sup>504</sup> *Motion Picture Association of America v. FCC*, 2002 WL 314871 86 (2002).

<sup>505</sup> 47 U.S.C. § 613.

<sup>506</sup> DirecTV Comments at 15. DirecTV argues that it faces ever-increasing regulatory burdens on its system capacity. It mentions that it now must provide video description services for certain programming along with closed captioning, comply with political broadcasting rules, and set aside four percent of its channel capacity for noncommercial programming of an educational or informational nature. *Id.* at 8-9.

<sup>507</sup> Comcast Reply Comments at 7 n.22.

the captioning shortfall for each channel and to substantially exceed the captioning requirements in the subsequent quarter.<sup>508</sup>

159. **Electronic Programming Guides.** Several commenters report on the use of EPGs.<sup>509</sup> Gemstar provides two different EPGs – Guide Plus+ and TV Guide Interactive.<sup>510</sup> Guide Plus+ is available to all television viewers, whether or not they subscribe to an MVPD because it is transmitted over the vertical blanking interval (“VBI”) of at least one broadcast station in most markets. A consumer needs a TV receiver that contains the hardware and software needed to receive and interact with this guide. Several TV manufacturers include this technology in their TV receivers and about seven million such TVs have been purchased.<sup>511</sup> Gemstar provides its second EPG, TV Guide Interactive, to MVPDs using satellite distribution. Cable operators marketing TV Guide Interactive, often under their own brand name, generally make it available only to digital tier subscribers.<sup>512</sup> Gemstar also licenses its technology to competing EPGs, including Ultimate TV and AOL TV. Gemstar’s revenues are generated through advertising and license fees from manufacturers and others using its technology.<sup>513</sup>

160. Comcast reports that it has entered into a long-term agreement with Gemstar to provide EPGs to a majority of its subscribers. It also uses TVGateway, a joint venture of Comcast and other cable operators, on several systems, including Mobile, Alabama, and Lower Merion and Willow Grove, Pennsylvania.<sup>514</sup> DirecTV states that all of its subscribers receive a fully interactive EPG, which is produced nationally but can be locally customized.<sup>515</sup> DirecTV’s EPG was developed by and is owned by the company and is specific to its technology. DirecTV does not charge for its EPG, nor is it supported by advertising.<sup>516</sup> Utilicorp states that it currently offers two different EPGs to its subscribers.<sup>517</sup>

161. Gemstar further addresses regulatory issues related to EPGs and requests that the Commission adopt a policy that will promote a competitive EPG market.<sup>518</sup> It argues that incumbent cable operators have the ability and incentive to discriminate against unaffiliated EPGs in favor of their own services. As it stated in its comments in the ITV proceeding, Gemstar urges the adoption of rules that prohibit discrimination by MVPDs against unaffiliated EPGs or the stripping of EPGs carried on the VBI of broadcast stations.<sup>519</sup> Moreover, it contends that a Commission prohibition of interference with unaffiliated EPGs not only will ensure the extent of competition in the EPG market, but it also will ensure whether the programming market is fully competitive.<sup>520</sup>

<sup>508</sup> *Discovery Communications*, 17 FCC Rcd 14600 (2002).

<sup>509</sup> *Norice*, 17 FCC Rcd at 11584.

<sup>510</sup> Gemstar Reply Comments at 1, 3, 6-7.

<sup>511</sup> *Id.* at 4.

<sup>512</sup> *Id.* at 4-5.

<sup>513</sup> *Id.* at 5. Gemstar states that it collects subscriber fees from approximately 17,000 subscribers who previously received EPG service from StarSight, a company Gemstar purchased.

<sup>514</sup> Comcast Reply Comments at 5. See also Gemstar Reply Comments at 7.

<sup>515</sup> DirecTV Comments at 18.

<sup>516</sup> *Id.*

<sup>517</sup> Utilicorp Comments at 10.

<sup>518</sup> Gemstar Reply Comments at 8-12.

<sup>519</sup> See *Nondiscrimination in the Distribution of Interactive Television Services Over Cable* (“Interactive Television Notice”), 16 FCC Rcd 1321 (2001).

<sup>520</sup> Gemstar Reply Comments at 11-12.

### C. Technical Issues

162. In this section, we update the information provided in the *2001 Report* regarding navigation devices and cable modems.”

#### 1. Cable Modems

163. Cable modem service allows cable subscribers to access high-speed data services, including the Internet, Internet Protocol (“IP”) telephony, and video conferencing. Cable modem deployment continues to increase, with manufacturers shipping 1.46 million cable modems in North America during the first quarter of 2002.<sup>522</sup> Cable modem prices have declined, ranging in price from \$69-\$120, depending on features.” The percentage of purchased modems has increased substantially relative to leased modems, with one analyst estimating that by 2004, approximately 32% of cable modem service customers will purchase rather than lease cable modems, up from 10% in 2001.<sup>524</sup>

164. **DOCSIS.** We continue to report on the progress of the CableLabs Certified Cable Modem Project (formerly known as Data Over Cable Service Interface Specification or DOCSIS), which defines interface requirements for cable modems and cable modem termination systems (“CMTS”) used for high-speed data distribution over DOCSIS cable systems. CableLabs provides a method for certifying that cable modems available for retail sale are in compliance with the DOCSIS specifications.” The DOCSIS 1.0 specification allows cable operators to deliver high-speed Internet services on a “best effort” basis simultaneously over the same plant as core video services.<sup>526</sup> CableLabs has certified 224 DOCSIS 1.0 modems and 28 DOCSIS 1.0 CMTS.”

165. CableLabs continues to improve upon DOCSIS services for the cable industry. It developed DOCSIS 1.1 to provide quality of service (“QoS”) functionality allowing operators to offer such products as IP telephony and tiered services, by using techniques known as data fragmentation, concatenation, and payload header suppression. IP telephony (also called “voice-over-IP” or “VoIP”) is expected to be an important service offering from cable operators. To date, CableLabs has certified 42 high-speed cable modems that comply with the DOCSIS 1.1 specification, and it has certified eight DOCSIS 1.1 CMTS.<sup>528</sup> In January 2002, CableLabs completed specifications for DOCSIS 2.0, the next

<sup>521</sup> See *2001 Report*, 17 FCC Rcd at 1318-23

<sup>522</sup> NCTA Comments at 48. For example, Comcast distributed cable modems through 1,200 retail outlets at the end of 2001, and Cox distributes through 498 retail locations, including major electronics retailers CompUSA, Circuit City, Best Buy, Office Depot, Radio Shack and Gateway. Some manufacturers distribute their DOCSIS certified modems directly to consumers. Motorola distributes cable modems directly to over 2,000 retail outlets throughout the United States. In addition, over 100 on-line retailers sell cable modems. *Id.*

<sup>523</sup> *Id.*

<sup>524</sup> *Id.* at 50.

<sup>525</sup> *2000 Report*, 16 FCC Rcd at 6092. See also CableLabs, at <http://cablemodem.com>

<sup>526</sup> “Best effort” is a term for a quality of service class with no specified parameters and with no assurances that the traffic will be delivered across the network to the target device. Newton’s Telecom Dictionary, 17<sup>th</sup> Edition, at 88.

<sup>527</sup> CableLabs, *DOCSIS Certified/Qualified Product Availability Continues to Grow* (press release), Sept. 26, 2002. CableLabs initiated certification testing of DOCSIS modems in 1999 and has since conducted 23 waves of certification, with the latest concluding September 20, 2002.

<sup>528</sup> *Id.* CableLabs states that equipment built to comply with the DOCSIS 1.1 specification is capable of supporting IP-based cable services offered by cable providers, including home networking, packet telephony and multimedia services. For a list of DOCSIS certified and qualified cable modem manufacturers, see CableLabs, *Certification & Qualification*, at <http://www.cablelabs.com/certqual/whocertified.html> (visited Oct. 18, 2002). For a list of (continued...)

version, which builds upon the capabilities of DOCSIS 1.0 and DOCSIS 1.1 by adding throughput and robustness in the upstream portion of the cable plant, from the consumer out to the Internet, and creating a network that has 30 megabit per second ("Mbps") capacity in both directions." This increase in upstream capacity is achieved by use of higher-order modulation, improved protection from RF impairments, higher symbol rates, and multiple modulation and access schemes ("A-TDMA" and "S-CDMA").<sup>530</sup> Both DOCSIS 1.1 and 2.0 will be compatible with all previous versions of DOCSIS cable modems and CMTS.

166. **PacketCable.** Packetcable, another CableLabs project, is intended to develop interoperable interface specifications for delivering advanced, real-time multimedia services over two-way cable plant. Built on top of the DOCSIS cable modem infrastructure, Packetcable will use IP technology to enable a wide range of services, including IP telephony, multimedia conferencing, interactive gaming, and general multimedia applications." In late 2001, CableLabs established the Packetcable test program to begin qualifying vendor equipment over the course of four certification waves in 2002.<sup>532</sup> More than a dozen MSOs are conducting technical trials based on the Packetcable specifications, and commercial deployments are expected to begin in late 2002 and into 2003.<sup>533</sup>

## 2. Navigation Devices

167. Section 629 of the Communications Act directed the Commission to adopt rules that would allow consumers to obtain "navigation devices," such as cable set-top boxes, remote control units, and other equipment, from commercial sources other than their cable providers.<sup>534</sup> In 1998, the Commission adopted rules that require MVPDs to unbundle security from other functions of the navigation device and, by July 1, 2000, to make available point-of-deployment modules ("PODs"), or other equipment, to separately perform the conditional access function." On reconsideration, the Commission deferred application of the rules requiring a separate security module for analog-only devices.<sup>536</sup> Thus, an MVPD subscriber will be able to obtain a set-top box without the security features

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DOCSIS-certified CMTS manufacturers, see CABLE DATACOM NEWS, *DOCSIS CMTS Vendors*, at <http://www.cabledatcomnews.com/cm/c/docsiscm.html> (visited Oct. 18, 2002).

<sup>529</sup> CableLabs, *CableLabs Completes DOCSIS 2.0 Specs, Enabling More Advanced Modems* (press release), January 16, 2002. Under this specification, capacity is tripled, facilitating enhanced services such as video-conferencing and peer-to-peer applications.

<sup>530</sup> See CED MAGAZINE, at <http://www.cedmagazine.com/ced/2002/0602/06wc.htm> (visited Nov. 7, 2002).

<sup>531</sup> See CableLabs, at <http://www.packetcable.com> (visited Oct. 18, 2002).

<sup>532</sup> CableLabs, *PacketCable Qualification Process Ready for 2002* (press release), Nov. 6, 2002. More than 40 vendors have submitted products for experimentation and assessment. *Id.* CableLabs has not yet certified any vendor's equipment. See Karen Brown, *PacketCable Tests Firm Up Cable's IP-Telephony Link*, BroadbandWeek.com, at [http://www.broadbandweek.com/news/020603/print/020603\\_telecom\\_three.htm](http://www.broadbandweek.com/news/020603/print/020603_telecom_three.htm) (visited Oct. 18, 2002). CableLabs established the specifications in late 2000. See CableLabs, *CableLabs Releases New Interim PacketCable Specifications* (press release), Nov. 28, 2000.

<sup>533</sup> NCTA Comments at 51

<sup>534</sup> 41 U.S.C. § 549

<sup>535</sup> 47 C.F.R. §§ 76.1202 and 76.1204. See *Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices* ("Navigation Report and Order"), 13 FCC Rcd 14775 (1998).

<sup>536</sup> *Implementation of Section 304 of the Telecommunications Act of 1996, Commercial Availability of Navigation Devices*, 14 FCC Rcd 7596 (1999); see 47 C.F.R. § 76.1204.

("host device") from retailers and will need the MVPD to provide a card-sized POD module for security functions."

168. Through the OpenCable project, CableLabs has developed specifications for the POD module as well as the interface that a host device needs to accommodate the POD.<sup>538</sup> CableLabs also developed the POD-Host Licensing Agreement ("PHILA") to provide manufacturers with the necessary technology to make PODs work in host devices.<sup>539</sup> The Consumer Electronics Association contends that although technical experts in the consumer electronics ("CE") and cable industries have developed the necessary minimal standards for digital cable-compatible equipment, there remain issues that the industries have yet to resolve, including copy protection, digital connectors, support for pay-per-view functions, certification process and Electronic Program Guides.<sup>540</sup> The CE industry proposes a non-exclusive agreement and suggests a number of alternative provisions to the existing PHILA.<sup>541</sup> One major television manufacturer, Panasonic, has signed the PHILA, allowing Panasonic to develop, manufacture, and market digital televisions that will be able to receive high definition and other digital programs via cable, including premium services, without the use of set-top boxes.<sup>542</sup>

169. CableLabs is continuing its efforts to develop next generation navigation devices with its initiative for the OpenCable Application Platform 1.0 ("OCAP") or "middleware" specification. The specification, completed on December 21, 2001, is designed to enhance the ability of the consumer electronics industry to build and market integrated DTV sets, digital set-top boxes, and other navigation devices directly to consumers.<sup>543</sup> OCAP 1.0 provides specifications for the downloading and execution of applications, such as program guides and interactive content, to any OCAP-enabled devices by any cable system supporting OCAP.<sup>544</sup> Six MSOs have indicated that their systems will support CableLabs-certified, OCAP-enabled devices once such equipment becomes commercially available.<sup>545</sup> In February 2002, major electronics manufacturers including Panasonic, Philips, Samsung, Sharp, and Sony participated in the OCAP Developers' Conference.<sup>546</sup> Fourteen companies have indicated they will build

<sup>537</sup> The POD requirement is intended to permit portability among set-top boxes, which will increase the market base and facilitate volume production. *Navigation Report and Order*, 13 FCC Rcd at 14793-4.

<sup>538</sup> See CableLabs, at <http://www.opencable.com> (visited Oct. 18, 2002).

<sup>539</sup> Set-top box manufacturers Motorola and Scientific Atlanta have signed the PHILA, and CableLabs is engaged in negotiations over the PHILA with other manufacturers. Letter from William A. Check, Vice President, Science and Technology, NCTA, to Magalie R. Salas, Secretary, FCC, Oct. 31, 2001.

<sup>540</sup> See Letter from Michael Perricone, Vice President, Technology Policy, CEA, to W. Kenneth Ferree, Chief, FCC Media Bureau (Sept. 11, 2002), at 1.

<sup>541</sup> *Id.*

<sup>542</sup> Panasonic, *Panasonic is First Major TV Manufacturer to Sign PHILA Agreement with CableLabs* (press release), Oct. 17, 2002. See also Bill McConnell, *Plug-and-Play Is On the Way*, BROADCASTING & CABLE, Oct. 28, 2002, at 42.

<sup>543</sup> CableLabs, *CableLabs Publishes OCAP Middleware Specifications* (press release), Jan. 3, 2002. OCAP 1.0 supports a JAVA-based Execution Engine (EE).

<sup>544</sup> NCTA Comments at 44.

<sup>545</sup> See Letter from William A. Check, Vice President, Science & Technology, NCTA, to Michael K. Powell, Chairman, FCC (Dec. 26, 2001), Attachment. Adelphia, AT&T Broadband, Charter, Comcast, Cox, and AOL Time Warner indicated their support.

<sup>546</sup> CableLabs, *Nearly 90 Firms Attend OCAP Developers' Conference. Interoperability Testing Event* (press release), Feb. 27, 2002. See also NCTA Comments at 46.



platforms using the specification.<sup>547</sup> In May 2002, CableLabs released OCAP 2.0, which is designed to support additional interactive applications in consumer devices.<sup>548</sup> The Consumer Electronics Retailers Coalition has expressed concerns that the OCAP specification contains technical requirements that are not consistent with the Commission rules prohibiting MVPDs from precluding the addition of features or functions in navigation devices.”

### 3. Emerging Services

170. We continue to monitor development of interactive television (“ITV”) technologies and services. The Commission has described ITV as a service that supports subscriber-initiated choices or actions that are related to one or more video programming streams.” Such services may include VOD,<sup>549</sup> PVR, gaming, e-mail, TV-based e-commerce (“t-commerce”), interactive advertising, Internet access, and program-related enhanced content.” Cable MSOs and DBS operators continue to develop these services as measures to increase subscribership, develop new streams of revenue, and reduce churn. We note that to date commercial two-way interactive service deployments have been very limited.<sup>550</sup> According to one analysis, there were 12.7 million ITV households, or 11.8% of total households (“THH”), at the end of 2001, and projected estimates of 22.1 million (20.3% THH) by year end 2002, 33.4 million (30.4% THH) in 2003, 45.7 million (41.1% THH) in 2004, and 58.2 million (51.9% THH) in 2005.<sup>551</sup> Revenue projections for ITV vary, depending on the services included in the mix, but one analysis estimates revenues increasing from \$467.8 million in 2001 to over \$1.5 billion in 2005, with

<sup>547</sup> CableLabs, *14 Companies Respond to CableLabs Software RFP* (press release), Sept. 30, 2002. The purpose of the RFP was to solicit industry implementations of OCAP to hasten the ability of cable operators to launch new services made possible by OCAP. *Id.*

<sup>548</sup> CableLabs, *CableLabs Publishes OCAP 2.0 Middleware Specifications* (press release), May 6, 2002. OCAP 1.0 extends the specification by adding support for web-based Presentation Engines, such as xHTML, XML, and ECMAScript.

<sup>549</sup> See Consumer Electronics Retailers Association, *Answers of Consumer Electronics Retailers Coalition to Hoedown Questions Regarding Cable Industry’s Draft POD Host Interface License Agreement*, filed June 6, 2002 in CS Docket No. 97-80.

<sup>550</sup> See *Interactive Television Notice* fn. 519 *supra*. The Commission sought comment on whether rules are necessary to prevent anticompetitive behavior and to promote diversity and capital investments in the ITV market.

<sup>551</sup> See ¶¶ 39-41, 69, and 106 *supra* for discussions of VOD developments.

<sup>552</sup> *2000 Report*, 16 FCC Rcd at 6088. One analyst defines ITV as two-way interactive services designed for the TV offered by any type of TV operator – cable, satellite, terrestrial broadcast – with a return path via cable, wireless or dial-up. See 2002 *emarketer Study*, fn. 99 *supra*, at 36. NCTA defines ITV as a combination of television with interactive content and enhancements, providing a richer entertainment experience as well as information, blending traditional viewing with the interactivity of a personal computer. ITV features can include graphics, Internet access, e-mail, chat, instant messaging, home shopping, home banking, interactive games, on-demand services such as weather and financial information, pay-per-view, and video on demand. See NCTA, *Cable Developments 2002*, Volume 26, Number 1, at 239.

<sup>553</sup> Jennifer Lee, *Interactive TV is Finally Here, Sort Of*, NEW YORK TIMES, Apr. 4, 2002, at E1.

<sup>554</sup> 2002 *emarketer Study* at 105. This forecast counts households using stand-alone PVRs and web/Internet TV services as well as interactive program guide services that use a return channel. In addition, this forecast is based on several assumptions: 1) that the growth of ITV households directly correlates with the growth of digital TV households, particularly digital cable services; 2) that the demand for premium digital content and a corresponding demand for interactive program guide and PVR functionality will drive digital TV and ITV services; and 3) that cable companies will need to offer additional interactive services in order to raise the average revenue per subscriber and prevent churn to DBS providers. *Id.*

subscription services accounting for nearly half of all revenues, followed by interactive advertising and e-commerce."<sup>555</sup>

171. A number of companies are involved in developing the technical standards, equipment and software necessary to provide ITV services.<sup>556</sup> CableLabs has recommended that cable operators include the European Digital Video Broadcast-Multimedia Home Platform ("DVB-MHP") application program interface in the OCAP specification in order to support ITV software applications in the United States.<sup>557</sup> In terms of production of ITV content and applications, the multiple but incompatible platforms in use today have slowed their development. In May 2002, the ITV Production Standard, Initiative, led by GoldPocket, released version 1.0 of its "XML" specification for writing interactive television programs.<sup>558</sup> TVXML Forum was formed in June 2002, but its focus is primarily on potential ITV messaging applications and the goal of unifying communications protocols between television, mobile phone and home PC platforms.<sup>559</sup> The group is planning to release its first specification sometime in 2003.<sup>560</sup> Over the past year, there has been consolidation among the major ITV middleware developers.<sup>561</sup> Major cable operators, DBS operators, and some overbuilders have agreements with companies such as Liberate, Wink, Open TV, Worldgate, and GoldPocket.

#### IV. ADMINISTRATIVE MATTERS

172. This 2002 *Report* is issued pursuant to authority contained in sections 4(i), 4(j), 403, and 628(g) of the Communications Act of 1931, as amended, 47 U.S.C. §§ 154(i), 154(j), 403, and 548(g).

173. It is ORDERED that the Office of Legislative Affairs shall send copies of this 2002 *Report* to the appropriate committees and subcommittees of the United States House of Representatives and the United States Senate.

<sup>555</sup> 2002 *Emarketer Study* at 109. Myers Mediaeconomics estimates that revenues will reach \$4.5 billion in 2005, from \$378 million in 2001; McKinsey Consulting estimates revenues of \$17.5 billion in 2005 (but provides no forecast from 2001-2004); and ABN-AMRO estimates revenues of \$20 billion in 2005, from \$359.5 million in 2001. *Id.* at 109-110.

<sup>556</sup> Major ITV middleware and content providers include Liberty's OpenTV, ACTV and Wink; Liberate; Worldgate; and GoldPocket Interactive.

<sup>557</sup> *CableLabs Adopts Set-top ITV Specs*, BROADCASTING & CABLE, Nov. 16, 2001. CableLabs believes that by adding this specification to the OCAP compliant digital set-top boxes, ITV producers will be able to develop content in a common format for worldwide distribution. *Id.*

<sup>558</sup> ITV Standards, *Full Specification of ITV Content Production Standards Published at Cable 2002 Conference* (press release), May 6, 2002. According to ITV Standards, the production standards, based on extensible markup language ("XML"), establish a method for content production for interactive programs, by specifying a common nomenclature and method for describing the timing and content of interactive assets such as trivia games, polls, interactive advertising, leader boards, and other interactive content, across set-top box middleware platforms. See ITV Standards, at <http://www.itvstandards.org/ITVPublic/overview.aspx>.

<sup>559</sup> Karen Brown, *Forum Seeks Common ITV Message*, BROADBAND WEEK, June 3, 2002. See also Duffy Hayes, *ITV End Game*, CED MAGAZINE, Aug. 2002 available at <http://www.cedmagazine.com/ced/2002/0802/id1.htm> (visited Nov. 15, 2002). The forum counts over 100 member companies operators, equipment vendors, content providers, and third party application developers.

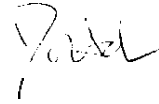
<sup>560</sup> *Id.*

<sup>561</sup> See, e.g., Christopher Saunders, *Liberty-Backed OpenTV Acquires ACTV*, Wink, INTERNETNEWS.COM, Sept. 26, 2002, available at <http://www.internetnews.com/IAR/article.php/1470941> (visited Nov. 15, 2002).

174. It is FURTHER ORDERED that the proceeding in MB Docket No. 02-145 IS TERMINATED.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch  
Secretary



## APPENDIX A

### List of Commenters

#### Initial Comments

AT&T Corp. ("AT&T")  
 Broadband Service Providers Association ("BSPA")  
 Comcast Corporation ("Comcast")  
 DIRECTV, Inc. ("DirecTV")  
 EchoStar Satellite Corporation ("EchoStar")  
 John Emerson ("Emerson")  
 Hometown Online, Inc. ("Hometown")  
 National Cable & Telecommunications Association ("NCTA")  
 National Rural Telecommunications Cooperative ("NRTC")  
 Satellite Broadcasting and Communications Association ("SBCA")  
 South Dakota Network, LLC ("South Dakota")  
 State of Hawaii ("Hawaii")  
 Utilicorp Communications Services, Everest Connections Corporation, and Ex-Op of Missouri, Inc. ("Utilicorp")

#### Reply Comments

AT&T Corp. ("AT&T")  
 Cablevision Systems Corporation ("Cablevision")  
 Comcast Corporation ("Comcast")  
 DIRECTV, Inc. ("DirecTV")  
 EchoStar Communications ("EchoStar")  
 Gemstar-TV Guide International ("Gemstar-TV Guide")  
 Hometown Online, Inc. ("Hometown")  
 Kansas City Cable Partners d/b/a Time Warner Cable KCCP (Kansas City Cable Partners")  
 National Association of Broadcasters ("**NAB**")  
 National Cable & Telecommunications Association ("NCTA")  
 National Rural Telecommunications Cooperative ("NRTC")  
 Northpoint Technology ("Northpoint")  
 Organization for the Promotion and Advancement of Small Telecommunications ("OPASTCO")  
 Satellite Broadcasting and Communications Association ("SBCA")  
 SES Americom ("SES")